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STUDY OF STORYBOARDING IMPORTANCE IN FILMS

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ABSTRACT

Different theories are being investigated, and analysts want to convey their findings and organise their ideas into visual narratives. While some programmers have visualised various stages of their research and used free-form canvases to encourage the users to explore their ideas, others have employed algorithms to identify significant occurrences in their data. The tale needs to be laid down in a systematic manner, and a graphic layout strategy that highlights particular events is needed. We suggest utilising the 'storyboarding' idea for visual analytics. Utilising storyboarding techniques in the creation of movies enables directors and other crew members to visualise shots in advance and assess potential issues. Composition, views, transition, annotability, interaction, and separability are the six concepts we outline for storyboarding for visual analytics. These ideas serve as the foundation for the creation of epSpread, which we then apply to the microblogging data set from the VAST Challenge 2011 as well as the Twitter data from the 2012 Olympic Games. We cover the design decisions we made and the technical obstacles we faced when creating the epSpread storyboarding visual analytics tool, demonstrating the success of our approach and outlining the lessons we learned from using the technique. Film content creation for broadcast is a challenging task requiring a large team of professionals and specialised tools. Production teams are constantly under pressure to create content that is more innovative and creative while using fewer funds and staff members. There is still a disconnect between creative choices made on location and those made during digital editing and post-production, even while technologies are being developed for digitising and streamlining parts of the production workflow. In order to encourage team innovation, we describe a prototype tangible, tabletop interface that will be used on a movie set. It leverages a storyboard as a shared data representation. We explore our implementation, define creativity in terms of collaborative teamwork, and provide a description of a deployment in which the prototype was used by a professional production crew during a filming session. Then we discuss the effects of our design choices on the creative process of making films and the advantages of tangible, tabletop collaborative interactive displays in live film production. Finally, we detail a number of intriguing interactions that were seen.

INTRODUCTION

The success of the movie is largely dependent on the scriptwriting process in the production of both animation and motion pictures. Directors or investors are concerned about choosing a good tale because the scriptwriting process is the initial step and all other works must adhere to the storyline in order to produce visual images (Mou and Tu, 2013). Story creation, however, is not an easy task; it calls for years of training, sharp observation, and ability, above all else. Despite the fact that a solid tale is written, a writer must turn it into a "script," which is a particular structure for film production and comprises dialogue, action, pacing, scene description, voice over, effects, etc. Converting a tale into a screenplay is another hurdle for beginning designers because writing a decent story isn't quite simple. There are five categories that can be used to classify modern cinema and animation plot sources: novel, comedic, true case, societal observation, and unique creativity. In this scenario, we can see that the dominant plot source is borrowing ideas from already published works, like novels, comics, and real-world incidents. Only a small portion of a tale is based on original thought and social observation, which demands conscious effort on the part of the author. As an illustration, the final draught of the script for the movie Avatar wasn't completed until 2007. From 1991 until 1995, a draught script for Shrek was in development before the first episode, which was released in 2001, could actually go into production. When the category and its representative works are displayed in visual form, it is clear that comic books and original creations are where the majority of animated films originate. Animation is a type of moving picture in which each frame narrates a particular scene's circumstances, and the entire collection of frames is assembled to tell a narrative. We can see that the main and crucial process of an animated film is its visuals and graphics. In addition to the written script, creating physical images from abstract written words is another difficult issue, particularly in the case of animated films. Transformations between the story and the script and the script and the picture could become a production barrier since there is a gap that needs to be filled and it involves a lot of time, effort, experience, and talent. As a result, a key concern in the creation of animation and motion pictures has been how to address this transformation issue and quicken the production process.

OBJECTIVES AND RESEARCH QUESTION

The real study project's goal is to help business establish methods and strategies for preserving "lessons learned" from prior endeavours and utilising previous experiences to prevent mistakes from being made in the future. This will free up working capacity so that it can be used for innovation and creativity instead. Using traditional stage gate models is a standard practise in the industrial setting to define a project. The storyboard approach is another way to describe organisational flow. Storyboard not only links to design methodologies, but it is also a design in and of itself, both as a process and as a final product, even though engineering-based models connect to design in various ways. It appears that the storyboarding method could be used to improve the study's internal validity. It can be seen from internal validity that some circumstances result in other circumstances. To identify convergent lines of inquiry, it is necessary to use a variety of pieces of evidence from various sources. The adoption of well-documented, repeatable techniques is also ensured. The discussion of storyboard as a technique for documenting experience from initiatives that result in finished products is the main focus of this essay. The two primary topics

addressed in this essay are: (a) Can storyboarding be utilised as a technique for documenting lessons learned from prior manufacturing projects? and (b) If yes, what benefits does the technique provide to the sector? In relation to current cognitive theories, this paper aims to investigate both issues and analyse the findings from a narrative theory perspective in relation to how external representations (such as sketches) support collaborative work; in this particular instance, that work is a reconstruction of a product realisation process.

BACKGROUND

A narrative's words, graphics, and material are organised using a storyboard. Storyboarding is a technique that is used in the film industry to grasp a story by moving from the abstract to the concrete through the creation of a visual representation of the verbal narration. The secret to using storyboard is to examine the scene's visual look and determine what kinds of problems need to be resolved before the notion can be understood. Concepts can be made clearer and easier to understand by translating action into visual appearance. In order to get alternative views on the unit of analysis when dealing with case studies, like in this project, it is common practise to use multiple sources of information. The gathering of physical artefacts is also a common source of evidence, as are interviews, direct observation, survey data, or archive material. In case study research, it's crucial to select the right data collection methods. A choice was taken to use a storyboard as a method early on in the project. The goal was to identify a trustworthy approach for data gathering that was related to our study field since the research project's objective is to develop design and visualisation methodologies for use in the innovation and product realisation processes in industry. The approach should include both a verbal and visual description of the current state of the innovation and product realisation processes of the organisations under study.Our requirements were met by the storyboard. In addition, it was hypothesised that using visualisation from the beginning of expressing the current situation might offer information about how a visualisation approach can be used to explain innovation and product realisation projects in hindsight. Six product realisation initiatives (labelled A–F) from the two companies under study served as the framework for the storyboarding exercise.

THEORETICAL FRAME

There is a storyline in a storyboard. The manner a tale is told might be referred to as a narration in narrative theory. When telling a narrative, the narrator affects the plot and, as a result, the episode that is told, which makes them an integral part of the discourse. Narrative theory is related to the storyboarding process.

Using the distinction between the narrative discourse and the story, literary theory employs narrative analysis to interpret dramatic structures. The narrator, who is the fundamental component of a narration, is the centre of narrative theory. A focalizer is the term used in narrative theory to describe the subject's point of view. The concept of focalizer has been applied to visual communication by the Dutch researcher Mieke Bal. The following points of comparison are crucial in order to make the notion work for storyboards:

- In a narrative discourse, focalization is the linguistics' primary direct content. Visual signifiers like lines, dots, light and dark, and composition are examples of direct content in visual art [8]. A storyboard's direct information and comments are attached to visual cues like arrows, lines, and various markers.
- In a story, there is an external focalizer that is, theoretically, distinguishable from the narrator but differs from it in terms of function rather than identity. An internal focalizer may be included in this exterior focalizer. For the analysis of the narrative, this embedding is vital. It might be difficult to identify the exterior and internal focalizers in visual art. A focus point that the viewer connects with is frequently created by the external focalizer (the artist). In a storyboard, the focalizer can be distinguished from the narrator(s) in relation to the spoken narration. But they do it by creating an internal focalizer through the sketches, one that might represent the perspective of a third party.
- The focalizer is thought to act as a medium for the fabula in narrative. The idea is used to suggest that the event represented in a work of visual art has the status of the focalized object created by the focalizer. An episode's most important elements are mediated by the narrator in a storyboard. The group as a whole and the individual participants in the actual workshops covered in this paper served as mediators of the tale of product realisation.
- This last idea leads to the possibility that various focalizers may have diverse interpretations of the same object or event. There are medium-bound ways in which the reader is led to believe these various views. However, both verbal and visual art use the same meaning-production method. A focalizer can use text and images in a storyboard to tell a variety of stories. The distinction between words and images as distinct sign systems may help to explain this. It may also be accounted for by the fact that internal focalizers such as arrows, markers, and lines for emphasising detail can also be used to explain the phenomenon.

Narrative theory is applied from two angles in order to interpret the storyboards from the workshop. The tale and narration concerning the product realisation should first be distinguished. In order to interpret the multiple levels in the narration, the notion focalizer is also utilised. In real workshops, the debate is started by asking the groups to share various details about the actual product realisation. A focalizer is an agent of a tale. As a result, the workshop facilitators serve as outside focalizers for the narration's choice of topics and focal points. The narration was influenced by each participant individually, some of whom provided verbal comments and others who contributed through sketches or spoken annotations on the storyboard. It is necessary to understand the visual cues, such as cross marks, lines, arrows, and other notations, as internal focalizers that direct viewers through the narratives. The participants were instructed to utilise a variety of colours while narrating the various stories in order to make interpretation and analysis of the focalizers' various positions easier.

Storyboards, which are frame-by-frame drawings used to illustrate verbal stories, are a common practise in the film business to help the entire production crew understand the storyline of the stories they are working on. Prior to the actual filming, it also helps with team organisation inside complex actions and gives a sense of the entire set. Here, a future scenario is depicted using a storyboard. By highlighting issues and assisting with planning, it adds value. Additionally, it gives teams working in the camera and lighting departments a grasp of the issue at hand as well as visual information. The storyboard is used to quickly and affordably analyse several concepts and

to get an understanding of what the viewer of the film will experience. To put it another way, it centres on the customer.

A means for telling a tale in the cinema medium, storyboards add value to the filmmaking process. We employ the technique, nonetheless, to recreate a product realisation process. With a focus on reflection and experience-based learning, our interest is in seeing if these storyboarding principles can be applied to retroactively summarising projects. The requirement for industry to have methods and strategies to record "lessons learned" from earlier projects is one of the driving forces behind this research's endeavours. The possibility is to describe prior projects with experience as the focus when utilising storyboard in a retrospective manner.

Ware asserts that one to three times every second, our brain gathers data from the surrounding visual environment. Our visual working memory is filled with this outside data. External cognitive tools must be created to take advantage of and compensate for limitations in human memory and information processing if memory facilitation is to be successful. A sketch, a map, a chart, or some other sort of poster can be a cognitive tool. Visual representations, as demonstrated by Tversky, relieve memory pressure because they externalise memory and lighten processing burden by allowing knowledge to be dependent on external rather than internal representations Working memory can be freed up to allow for the processing of new knowledge and the stimulation of creativity. On the other hand, words, representations, figures, and pictures have an impact on memory. Because new ideas are created by the representations, a story can readily change its course.

METHODOLOGY

Two global corporations (Company 1 and Company 2) in the manufacturing and transportation industries, respectively, participated in the research. A majority of male engineers with extended work histories (10–25 years) and those with more recent employment (1-2 years) made up the participants, who represented the fields of product design, product management/integration, and R&D. In the groups, there were both managers and non-managerial staff members. The study was conducted over the course of two full-day workshops held in the company's facilities in November 2010 with the help of three researchers acting as facilitators. There were three groups of ten to fifteen people in each workshop. The groups in Company 1 are designated as A, B, and C. The groups in Company 2 are D, E, and F.

Figure 1 depicts the layout of the workshop. The workshops began with an explanation of the idea of storyboards and how to use the technique. Then the staff split into small groups of two to four people, and a facilitator went over the details of the session and distributed the materials. The materials included a storyboard template, post-its for making sketches on so they could be easily moved around, and four different coloured pencils. The facilitator's job was to be the one doing the narrative and, as a result, be in charge of asking supplementary questions like "interesting, tell me more" and "really, how do you mean" to develop the story and promote group contemplation. Following that, the groups were given four questions and instructed to sketch and write the answers on post-its. The questions were then all separately placed in an envelope and unwrapped one at a time after each question was answered. Here are the inquiries:

1. Would you mind giving me a brief overview of the case, beginning to end?

2. Can you identify the individuals who were crucial to the project's various phases?

3. Could you briefly describe something important to the project—internal or external—that you believe was crucial?

4. Can you give examples of some environments that were crucial to the project?

In order to show what was depicted on the storyboard when the first question's subject matter was discussed, the first question was matched with a black pen. The participants switched from using a black to a red pen when describing or sketching for the second question, which was coupled with a red pen. A blue pen was assigned to the third question, and a green one to the fourth. The audio recording of the 45–60-minute session was made. The first question was the longest and took between 30 and 40 minutes to answer; it's vital not to speed through it because the group will be in charge of the narrative. The groups were ultimately given the task of planning a brief presentation for all of the workshop attendees. Because the storyboard may be changed, the usage of post-it's in this situation was helpful. Over the course of 5–10 minutes, the groups interacted with the other participants as they shared their stories. It was also captured during this session. The researchers read and evaluated the transcripts of every session. The data was divided into groups and analysed using the theory of distinct focalizers and how they affect narrative.

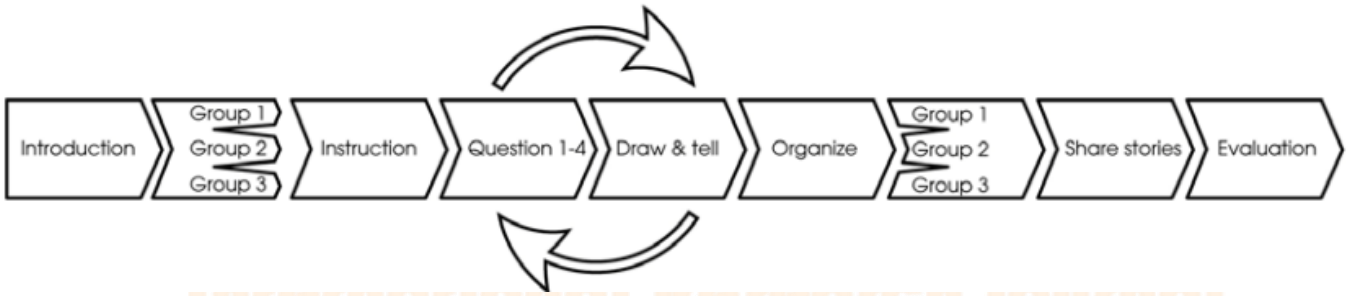


Figure 1: The layout of the workshop

RESULT

There are certain recurring patterns that emerge while examining the storyboards. In the section below, these will be discussed and given examples.

Visual Signifiers

It is made apparent in the material that several participants relate various stories in the oral text and in the sketching. By using symbols for items, the participants create visualisations. Group D visualises a nation by drawing a flag, while Group F uses a book to convey a lot of criteria. Additionally, they create graphs, such as an upward curve for successful sales or a downward curve for unsuccessful sales in group A, as well as metaphors (such as a sun for something admirable and positive in group B and a clock to denote a lengthy development period in group C). Furthermore, the group draws people. However, text can also be used to indicate certain people. A smiling hayman is used by group B to symbolise a satisfied consumer. The fact that the visualisation frequently portrays the participants' abilities and backgrounds also becomes obvious from the reading of the

material. For instance, in examples A, B, and C, product designers just depict the main product and ignore marketing-related concerns. Issues pertaining to marketing are not even lightly sketched. Before the fourth inquiry, locations are sometimes represented by written language but are never depicted.

The storyboards' verbal and visual data demonstrates that when participants find it difficult to explain themselves, they employ various techniques. One method is to exclusively explain the issue verbally, like in the case of an event or a circumstance. On the storyboard, there are no signs in this instance. Nothing is pictured. As opposed to this, there is a "blank" space on the storyboard that, along with the verbal information, highlights a crucial point. One instance is in group D, where the significance of getting a contract is verbally conveyed but not visibly. Using text as both visual and auditory communication when attempting to explain something challenging is a second tactic. As a result, just the most important bits of the text are communicated through words, leaving out less significant ones. In group D, for example, the word "China-adaption" is written down rather than the image of "cultural training." A third tactic is to use symbols to visually and orally describe the subject, but to provide a disclaimer about how difficult it would be to draw the symbol.

When something is difficult to describe, it is partially left out of the storyboard, as seen in Figure 2, which contrasts the differences between spoken and visual information. When a workshop facilitator poses a query that draws attention to a particular area of the process's focus, as we previously noted, that person is said to be acting as an external focalizer. The workshop attendees were obliged to react and begin speaking when they were posed with questions. In each case, they started by debating the project's origin and what or how to portray it. "I have a timescale here to describe that we had some pre-development here, (...) We defined the problem to solve, and then we made the prototypes, then we skipped the prototype, and then we (...) skipped the first solution, (...) and then we (...) I don't know if that picture was the best to describe what I said," participant B1 says. B1 is referring to Figure 2, which is not at all depicted in the sketch, which instead claims that the story starts with an irate client and items that perform poorly before 1994.

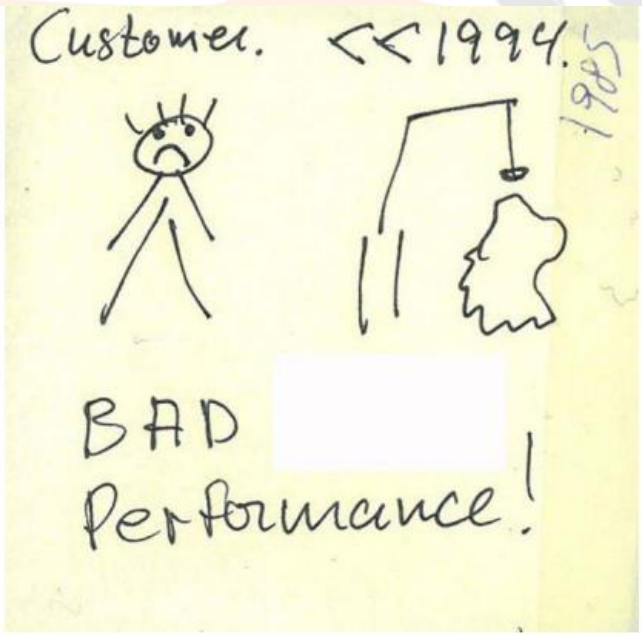


Figure 2: The sketch differs from the oral information

Similarly, to how a project is organised spatially, a storyboard has a spatial structure.

Twelve pre-printed yellow squares overall, four in each of three rows, made up the structure of the storyline. The cases demonstrate that the backgrounds had an impact on where the post-its were placed and how the groups arranged their post-its. In the material, there are two distinct methods. When creating a chronological storyboard for four examples (A, B, D, and F), the groups adhered to the format and used one or two sheets of paper, neatly placing each post-it in the appropriate square. The order of the post-its was ultimately adjusted by one group.

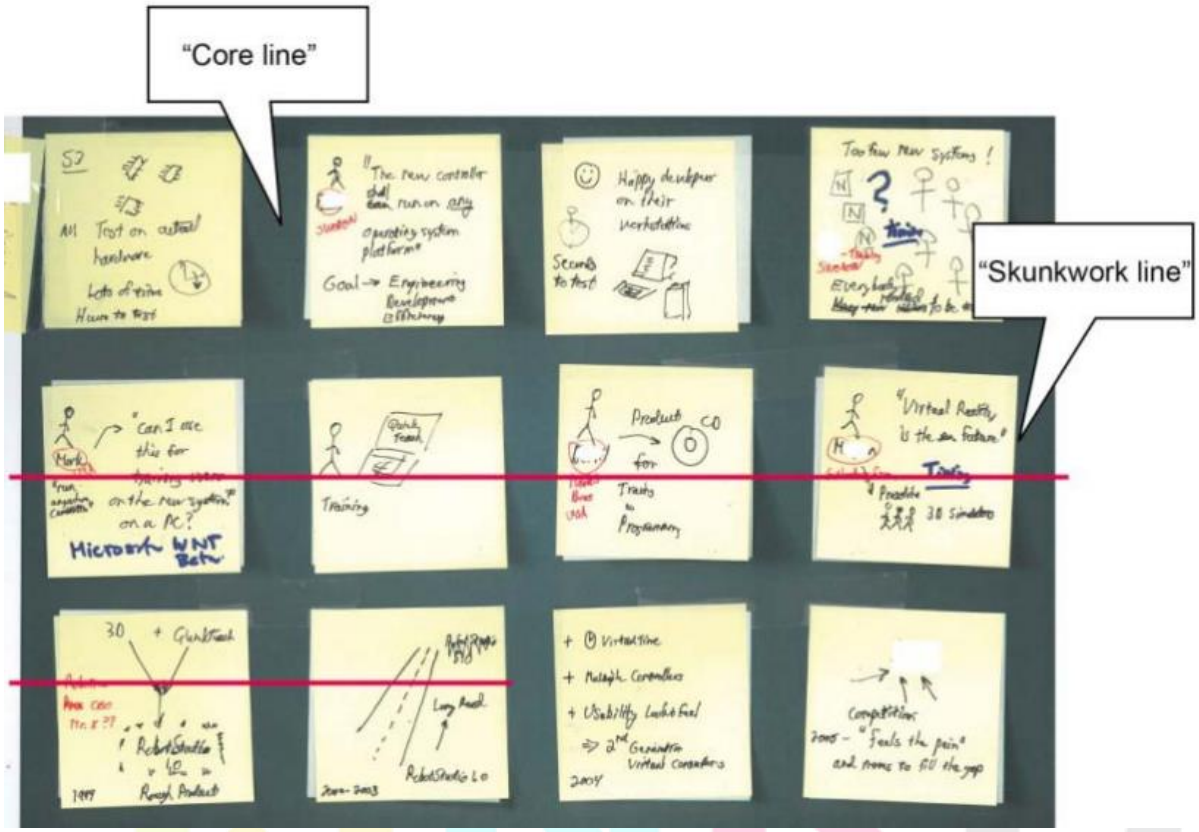
However, they clung to the pre-printed structure and made use of the opportunity to move post-its about with fresh ideas. Participants in Cases C and E tried to undermine the frame's construction. It was somewhat neglected to organise the background. In instance E, the method of placing all the post-its on the table while delivering the narrative and placing them in order during the final three minutes generated a round circle, a form that better suited the dramaturgy of that section of the story. That is one method of resolving the problem of how to convey complexity and simultaneous actions in a storyboard. Both positive and negative effects can be attributed to the storyboard structure. The groups felt constrained by the pre-printed structure, which the informant appears to find challenging to breach. B1 in Case B, for instance, states: "For me, it's easier if you have a whiteboard, than (...) here, you are constrained in the small space available." The response from Informant B2 is: "But isn't that the whole point? It should be brief. It makes you think in many steps (...). The structure compels the group to pay attention to significant portions of the narrative, but not only those. Modularity is another benefit. The verbal narrator delivers the story in a group interview. In a group interview with a storyboard, the tale is divided into modules (= post-its), the modules are moveable, and the whole group can rearrange and insert something spoken by another person in a different location. In a verbal story, the same freedom is not possible. The group can create their own version of the story based on what they understand by improving, arranging, and rearranging the story. By doing so, they foster a shared understanding of the project.

The group is affected visually by the story, and the narration's overall perspective provides new information. Can you tell me what people were crucial in different sections of the project in Case C? Case C involved the story being told once, and the workshop facilitator acting as an external focalizer by posing question number two. There were discussions and jokes about what to draw earlier in the drawing and storytelling. The metalevel of creating a storyboard was thus already present in the dialogue. However, in this case, the visual overview of the project and the storyboard's spatial organisation appear to have a spatially-oriented effect on informant C1's thinking. The internal focalizer was felt by Informant C1. They are mentioned by C1 in the spoken dialogue as follows: "One of those features that I think is extremely intriguing here is that this shell, this top line, is really the core, the fundamental product. This small shell over here is almost like the little skunk work side; this is the group that isn't part of the core; they're over on the other side of the Atlantic. C1 observes that the spatial organisation, or the "top line" of the storyboard, may be comparable to the spatial organisation of the product realisation project in the actual world (see Figure 3 below). The storyboard's structure was created with the idea of a chronological sequence, but suddenly a spatial order appears. The main item is shown on the top line. Line two then represents the "skunk work" side, where development is taking place in a different Swedish city and on the other side of the Atlantic. With the skunk work team, it is demonstrated on line three that it is possible to go a great distance (see post-it 10 in Figure 3 below). This line cannot continue to deteriorate outside of the company. It was reincorporated into the project near the conclusion of the storyboard. C1 considers a divide along these lines in other projects and determines, based on his experience working for the company, that this line is crucial for the innovation.

Figure 3: Storyboard Company 1, group C. The spacial distribution of the storyboard.

DISCUSSION

There are various issues with the validity of using storyboard as a research technique, as shown in Figure 5. To begin with, determining the method's beginning can be challenging. Is it when the approach is first introduced to the large group, when small group work begins, when the first conversation with the department director occurs, or when all of these things happen simultaneously? In order to ensure that the "black pen narrative" is objectively produced by the researcher, the researcher must be extremely cautious about what information is shared when planning the workshop. Second, participants considered two questions on a meta level: Who are willing or able to sketch, and what to sketch? Some of them adopted a more proactive stance by picking up the pen and drawing first because they had varying levels of drawing ability. He or she assumed the role of agent (focalizer) for the group by doing this. On the group process, the sketches had an effect. By changing the focus on, for instance, the hierarchy within the group and who has the authority to direct the narration, it may also help to create new narratives in addition to fostering a shared understanding of a project.



Both those who speak and those who hold the pen can take the initiative. However, because we assembled numerous teams of two to four workers, the researchers had access to not only a number of examples but also the worth of various viewpoints on each one. Discussions on the narrative and data from various sources can reveal a pattern in the information that has been backed up by the group's work on and discussion of the storyboard's content. By focusing on the synthesis of internal and external knowledge, the storyboard-related effort also gives the phenomenon new meaning. All of this takes place at the same time that the storyboard is being created. The conversation starts first. While the others are still thinking, someone draws a sketch, after which the sketch is built collectively. An analogy to the creative process would be this iterative procedure. The way that the narration is created through this process, forming a unified mental picture of the phenomenon, is equally captivating.

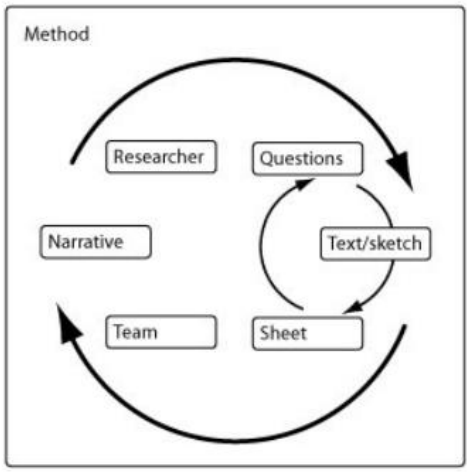


Figure 5. The method of storyboard with a focalizer and the relationship between the focalizers and the iteration in creating the storyboard.

When the approach is used in an industrial setting, what can we infer about it?

The storyboard is appropriate for study on how to record experiences of workflow processes and the evaluation of completed projects because it is simple to develop and access. There could be a tremendous deal of learning by producing multiple storyboards on the same case, but from various departments. It would be intriguing to analyse the many components of the story, whether and how they vary from group to group, and what is beneath the post-its in the storyboards. Strong points for new questions are the areas that are "not covered," "blank," "in between," or "the grey." These "blanks" serve as justification for additional research! The workflow is neither totally represented in the storyboard, nor is it a simplified representation of how a case was handled in an organisation. A common concept was developed by the participants when creating the storyboard, and it is a tale that the participants tell. As focalizers for the narrative in the storyboards, the text, object symbols, graphs, lines, people, and metaphors are used in the material. A person can be in an inside position in a frame if they make references to their own experiences and establish an internal focal point (by making a mark or sketch, for example). In each case, the group began by talking about the project's origin and what or how to sketch. The players are compelled to respond and begin debating how to communicate in the storyboard's opening frame.

The sketching done by the informants appeared to be of known and skillful subjects. When something is tough to sketch, there are three techniques that can be found in the material: The options are to: a) explain the topic orally, in which case no signs appear on the storyboard and nothing is visualised; b) use both oral and visual communication, in the form of text; and, c) explain the topic orally and visually, in the form of symbols, but with a comment on how difficult it would be to draw it. It's interesting to note that neither locations nor marketing are depicted in the storyboard; perhaps they are not thought to be crucial or are just part of the narrative that is not visible. The numerous pen colours represented various aspects, supplementary information, its placement, and actions that were later marked with various colours. The verbal narration served as the main focus of the workshops, and occasionally the real focalizer (a member of the group or the group as a whole) would narrate separate stories in the text and the images. It might be accounted for by the fact that words and images use various symbol systems. Aside from that, visual cues for emphasising detail like arrows, markings, and lines also serve

as internal focalizers. In conjunction with employee voice recordings, storyboards create a multi-layered picture of the cases, exposing various layers and shedding light on details that, for instance, would not often be visible in interview or stage gate models.

The group's effort is both constrained by and structured by the storyboard's arrangement. The group is able to think about, restructure, and polish the story through the externalisation of the material. Supporting it is the modularization. Knowing the outcome inspires fresh thinking. You can plan your scheduling and timing by grading the problems. Participants gain an overview of the entire process thanks to a working-flow diagram or schedule that facilitates involvement. The intention of these sketches is to clarify the idea and its setting. The roughness of the sketch might be what enables other participants and coworkers to contribute value to it by interpreting it in their own manner and putting written or drawn remarks on it, acting as a kind of door opener to new associations and deeper knowledge of things.

Individual thought and interaction between participants and the facilitator are both facilitated by the creation of the "information graphic," which combines text and sketches. A frame in the storyboard can be pointed at by a participant or the facilitator to delve deeper into a certain topic in the narrative. The cartoon efficiently conveys information and offers insight into the themes it explores. Having all the required information in one place and forming a shared mental image of the phenomenon are the goals of the storyboard. The formation of knowledge through contemplation of the occurrences uses these sketches as a foundation. There is a difference between utilising storyboards to reflect on and learn from events and using them to create a future vision (as in filmmaking).

How does using a storyboard help you remember your past experiences?

According to the participants' testimony, the storyboard framework enabled them to concentrate on one component or issue of the real procedure they were required to retell at a time. Following the storyboard session, all participants gathered with the purpose of presenting the storyboard to everyone and discussing the workshop. As a result of a lack of concentration, some participants in this discussion noted that the review of completed projects frequently came to nothing. A more thorough comprehension of project working flow is required. One outcome of the sessions was that the attendees discovered a simpler, more manageable way to gain a deeper understanding of workflow. Additionally, they expect the tools necessary to evaluate ongoing and completed projects using the storyboard method in the future.

CONCLUSION

For collecting earlier experience from a product realisation project, a storyboard can be suggested as a supporting method. It is also acceptable to borrow the term focalizer from the narrative theory because it aids in our understanding of how the storyboard's range of focus relates to various people and how it relates to the facilitators' questions. The narrator, or storyteller, is the focal point of narrative theory because they are the heart of a narration. To capture the experience from the workflow and evaluate the product realisation, the emphasis has been on interpreting the relationship between the group's and an individual's story as communicated. The focalizer serves

as the story's agent. Additionally, we can omit a number of agents, including specific people and the group as a whole, from storyboards created by a group. The questions posed by the facilitators sparked fresh recollections among the participants, which produced new elements of the story. On occasion, the internal focalizer also shifted as a result of the addition of fresh visual cues. The narrative took on a visible form and became tangible as a result. Finally, it was feasible to determine the focalizer's position at various points for the group and the facilitators. In this case, the inclusion of a range of colours in the storyboard's answers was essential since, without it, it would have been impossible to distinguish between the various positions (or focalizers) the group adopted in the responses. The study's emphasis has been on using storyboards in retrospect. However, when producing new, innovative products or services, the use of storyboards to explain processes and to describe the connections between storytelling and story making is of interest; this research is still in progress.

The absence of comprehensive narrative transitions, lack of plot fluency, choppy speech, and lack of imagination were some of the participant-proposed downsides, even though most participants found the method to be beneficial. The 10 to 15 storyboard panel limit did prevent some emotional reactions or intricate activities from being revealed. The exercise was unable to adequately demonstrate plot transition and fluency as a result. But the goal of our study is to see whether the new approach can actually be used to create tale content. Consequently, even though the design limitations may result in the loss of some elements, the general growth of the tale and experimental control are more crucial. A good animation story can be demonstrated through the use of proper acting poses and facial emotions, especially in terms of dialogue design. As a result, dialogue writing is not as crucial as beginners may have believed if the storyboard image can convey the meaning of the plot. There were both supportive and unsupportive views on the problem of imagination. Some beginners thought the technique was less creative than others, but most beginners loved exploring storyboarding to acquire their desired frame. It might be inferred from this that they lack design expertise. Because there was little association between creativity and story design performance, it does not necessarily follow that they were less creative. The only conclusion we could draw from this is that this strategy works best for designers who are skilled at image modification. It is nevertheless possible to learn using the conventional way for participants who were not skilled at creating images.

REFERENCES

1.https://journals.sagepub.com/doi/abs/10.1177/1473871613487089?journalCode=ivia

2.Angelone, S. 2019. “A New Generation of Scientists-as-filmmakers: Experiences Gained in Switzerland.” *Science Communication* 41 (3): 369–377. doi:10.1177/1075547019837620. [Crossref], [Web of Science ®], [Google Scholar]

3.Glebas, F. 2008. *Directing the Story: Professional Storyboarding and Storytelling Techniques for Live Action and Animation*. New York: Focal Press. [Google Scholar]

4.Heft, H., and R. Blondal. 1987. “The Influence of Cutting Rate on the Evaluation of Affective Content of Film.” *Empirical Studies of the Arts* 5 (1): 1–14. doi:10.2190/HDKG-UBXY-XKFB-Y7EE. [Crossref], [Google Scholar]

5.Hullfish, S. 2017. *Art of the Cut*. Routledge. ISBN 978-1138238664 . [Crossref], [Google Scholar]

6. Katz, D. S. 1991. *Film Directing Shot by Shot. Visualization from Concept to Screen*. Michigan: Michael Wiese Productions. [Google Scholar]

7. Miller, D. 1957. *The Story of Walt Disney*. New York: Henry Holt and Company. [Google Scholar]

8. Murch, W. 2001. *In the Blink of an Eye: A Perspective on Film Editing*. Silman-James Press. ISBN 1879505231 . [Google Scholar]

9. Pallant, C., and S. Price. 2015. *Storyboarding: A Critical History*. New York: Palgrave Macmillan. [Crossref], [Google Scholar]