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REVISITING A.I'S EFFICIENCY FOR STORYBOARDING: A COMPARATIVE ANALYSIS

REVISITANDO A EFICIÊNCIA DA I.A PARA *STORYBOARDING:* UMA ANÁLISE COMPARATIVA

REVISITANDO LA EFICIENCIA DE LA I.A PARA STORYBOARDING: UN ANÁLISIS COMPARATIVO

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ABSTRACT
This study revisits a 2025 experiment to evaluate how generative A.I tools (Storyboarder.ai, Boords, and QuillBot) compare with a human artist in creating storyboards for an animated series, using criteria by Boyd (2020). While A.I platforms offer rapid generation and improved aesthetic rendering, they suffer from severe narrative limitations, spatial inconsistencies, and artificial hallucinations, such as fabricating scenes or misinterpreting character descriptions. Ultimately, the A.I tools fail to comprehend narrative context. The study concludes that human artists remain essential for professional audiovisual pre-production, as they successfully deliver the narrative intent, continuity, and emotional depth required for realistic workflows.

KEYWORDS: *Storyboards. Artificial intelligence. Comparative study.*

RESUMO
Este estudo revisita um experimento de 2025 para avaliar como ferramentas de IA generativa (Storyboarder.ai, Boords e QuillBot) se comparam a um artista humano na criação de storyboards para uma série animada, utilizando os critérios de Boyd (2020). Embora as plataformas de IA ofereçam geração rápida e renderização estética aprimorada, elas sofrem com severas limitações narrativas, inconsistências espaciais e alucinações artificiais, como fabricar cenas ou interpretar mal descrições de personagens. Em última análise, as ferramentas de IA falham em compreender o contexto narrativo. O estudo conclui que os artistas humanos continuam essenciais para a pré-produção audiovisual profissional, pois entregam com sucesso a intenção narrativa, a continuidade e a profundidade emocional exigidas por fluxos de trabalho reais.

PALAVRAS-CHAVE: Storyboards. Inteligência artificial. Estudo comparativo.

RESUMEN
Este estudio revisa un experimento de 2025 para evaluar cómo las herramientas de IA generativa (Storyboarder.ai, Boords y QuillBot) se comparan con un artista humano al crear guiones gráficos para una serie animada, usando los criterios de Boyd (2020). Aunque las plataformas de IA

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ofrecen generación rápida y renderizado estético mejorado, sufren de severas limitaciones narrativas, inconsistencias espaciales y alucinaciones artificiales, como fabricar escenas o malinterpretar descripciones de personajes. En última instancia, las herramientas de IA no logran comprender el contexto narrativo. El estudio concluye que los artistas humanos siguen siendo esenciales para la preproducción audiovisual profesional, pues entregan con éxito la intención narrativa, la continuidad y la profundidad emocional que exigen los flujos de trabajo reales.

***PALABRAS CLAVE**: Storyboards. Inteligencia artificial. Estudio comparativo.*

INTRODUCTION

A storyboard is an audiovisual pre-production tool widely used to assist in the planning of films, series, animations, advertising, and various other visual productions. Its primary function is to transform a written script into an organized visual sequence, allowing directors, producers, and technical crews to anticipate framing, camera movements, character positioning, scene pacing, and potential production challenges. More than just a set of drawings, the storyboard functions as a strategic tool for creative and financial organization, reducing errors, optimizing resources, and facilitating communication among the different departments involved in a project. Although an optional step, its importance becomes evident in projects with greater technical complexity, such as action scenes, animations, musical sequences, or moments that demand strong visual and emotional control over the narrative. In these cases, the storyboard artist's ability to interpret the script and propose clear visual solutions becomes fundamental to the production's success.

With the popularization of generative artificial intelligence (GAI) in recent years, especially after the expansion of text-to-image generation tools like ChatGPT and other specialized platforms, several creative fields have begun to incorporate these technologies into their workflows. The promise of speed, practicality, and low cost has led artificial intelligence (A.I) to be viewed as a potential replacement for stages traditionally executed by human artists (Silva, 2024). In the case of storyboarding, this possibility draws particular attention, as it is a sensitive stage of pre-production where misinterpretations can compromise the subsequent execution of the work.

In a study conducted by Carvalho *et al.* (2025), the effectiveness of three specific artificial intelligences for creating storyboards was analyzed, comparing their results with a storyboard developed by a human artist. At that time, it was concluded that the tools were not yet capable of correctly interpreting a script and transforming it into a functional sequence of images, showing flaws in clarity, composition, and narrative continuity. However, considering the rapid pace at which these technologies evolve, it is necessary to revisit this discussion. In just over a year, new features have been incorporated into existing platforms, other tools have emerged, and visual

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generation capabilities have become significantly more sophisticated. The following question then arises: is current artificial intelligence already capable of fulfilling the practical function of a storyboard within a real audiovisual production?

Thus, the present study aims to once again compare the performance of generative artificial intelligence tools in creating storyboards with the work of a human artist, primarily analyzing what has changed since the previous research and whether there have been significant advances in the capability of these platforms to interpret an audiovisual script. To achieve this, three distinct tools (Storyboarder.ai, Boords, and QuillBot) were tested using the same script from the previous study, which refers to the first episode of the children's animated series “Os Caramelos”. The analysis follows the criteria proposed by Boyd (2020), considering efficiency, clarity, and composition as essential elements for building a functional storyboard.

In addition to the technical comparison, this article also discusses the problem of so-called artificial hallucinations (a phenomenon in which artificial intelligence creates information non-existent in the original material, such as scenes, actions, or visual elements not planned in the script). In a pre-production tool, this behavior represents a significant risk, as it directly compromises the reliability of the creative process.

Therefore, this research seeks to contribute to the academic discussion on the limits and possibilities of using artificial intelligence in the audiovisual sector, especially in the fields of animation and cinematic pre-production, reinforcing the importance of critical analysis regarding the role of these tools and the permanence of the human eye as a central element in narrative construction.

1. THEORETICAL FOUNDATION

1.1. The Storyboard

Parris (2020) defines the storyboard as a form of visual storytelling consisting of a series of sequential images, whereas Rousseau and Phillips (2013) establish it as a planning tool that can be utilized across a variety of disciplines. In its most basic format, the storyboard is an audiovisual pre-production tool whose objective is to create a visual draft of the final product, whether it be a film, animated series, a product advertisement, or others. This draft must be capable of conveying the framing of each scene, character movement, camera motions, settings, the approximate duration of each scene, and various other details. Consequently, directors and producers are better positioned to anticipate potential production obstacles, as well as to organize the logistics of labor, resources, and deadlines.

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1.2. Generative Artificial Intelligence

Generative artificial intelligence (GAI) is an artificial intelligence (A.I) technique that generates synthetic artifacts by analyzing training examples, learning their patterns and distribution, and subsequently creating realistic facsimiles (Jovanovic; Campbell, 2022). Although this tool has existed since the dawn of computer science (McCorduck, 2019), it has only become popular in recent years, due primarily to the refinement of the chatbot ChatGPT developed by the American company OpenAI. This initiated a technological race to refine these models, enhancing their interpretation capabilities, improving their outputs, and expanding the range of available features. Among the most popular uses is precisely image generation. This feature provides users with the ability to generate, through a simple text prompt, figures that appear to be drawings, photographs, graphics, screen captures, and so forth. The resulting output yields diverse levels of quality and verisimilitude.

When working with any GAI model, however, it is crucial to be aware of the possibility of “artificial hallucinations”. This phenomenon is observed when a machine generates an output that does not correspond to any factual reality (Alkaissi; McFarlane, 2023) such as fabricating a false statement and citing a non-existent source to substantiate it. This occurs when Generative A.I models are fed a vast amount of unverified information, such as social media and the internet at large. Such hallucinations pose a risk, as the act of verifying the veracity of this information becomes the responsibility of the user themselves, and depending on the nature of this information, it may cause damage to the individual or to others. An example of this is a 2025 case in which a lawyer from Santa Catarina was fined by the Court of Justice for presenting an appeal containing jurisprudential information fabricated by artificial intelligence (Borges, 2025). For the present study, the nature of these artificial hallucinations manifests in the fabrication of scenes and dialogues that do not exist in the original script, with examples available in section 3 of this article.

2. METHODS

The present study is exploratory in nature, aiming to provide greater familiarity with a problem and thus render it more explicit or construct hypotheses (Gil, 2017). Employing a qualitative approach, its objective is to compare the results of storyboards developed through GAI tools with a storyboard created by a human artist, primarily analyzing how the outcomes have changed and/or improved in the one-year period since the previously conducted study. The methodology utilized will be identical to that of the prior study, with the purpose of testing the

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same hypotheses, now utilizing potentially more advanced tools. Accordingly, to ascertain whether the storyboards produced by GAI tools fulfill the fundamental requirements of a production, the results were evaluated based on the criteria defined by Boyd (2020), detailed below:

1. Agility: In the audiovisual industry, a storyboard artist must create hundreds of frames within a short timeframe to meet the demands of most productions, rendering development agility fundamental.

2. Clarity: Although storyboard sketches do not need to be meticulous or visually appealing, it is essential that the identity and movement of both actors and cameras are clear to prevent misinterpretation by any team member.

3. Composition: This refers to a set of elements related to the mise-en-scène, such as scene framing, the positioning of characters and objects, and the setting design, all of which influence the spectator's interpretation of a scene. To ensure that the final output after filming or animation aligns as closely as possible with the director's intentions, it is crucial that the composition accounts for both the functional and emotional purposes of the narrative, as well as production constraints.

3. RESULTS

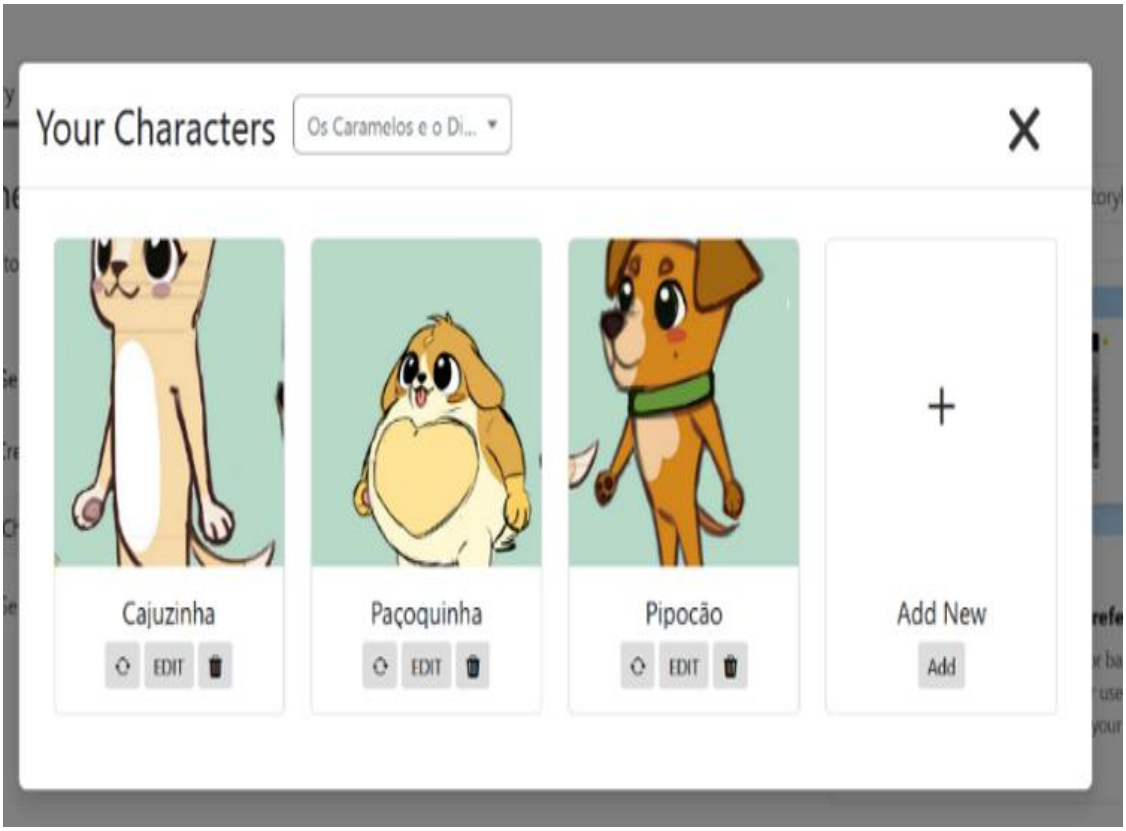
For the present study, the selected script was the same as the one used in the prior study, namely the script for Episode 1 of the animated series “Os Caramelos”, written by Diego Moreau de Carvalho and developed by the DesignLAB at the Federal University of Santa Catarina. The script is presented in Appendix 1.

3.1. Storyboarder.ai

As it was done in the prior study, the first platform tested was Storyboarder.ai. To initiate the process, the user can import a script in PDF format or input it directly into the text box. Unlike the previous study, the platform has now updated its language options, and the storyboard is no longer automatically translated into English, remaining in the original language instead. The user is provided with the option to allow the software to automatically format the scenes and dialogues of the script. The tool has also innovated by introducing the capability to specify character appearance; thus, the artwork developed for the animated series was uploaded (Figure 1). Subsequently, the user selects the preferred art style for the storyboard, choosing from various options such as black and white, animation, realistic, among others. For the present study, the "animation" style was selected.

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Figure 1. Storyboarder.ai character creation screen

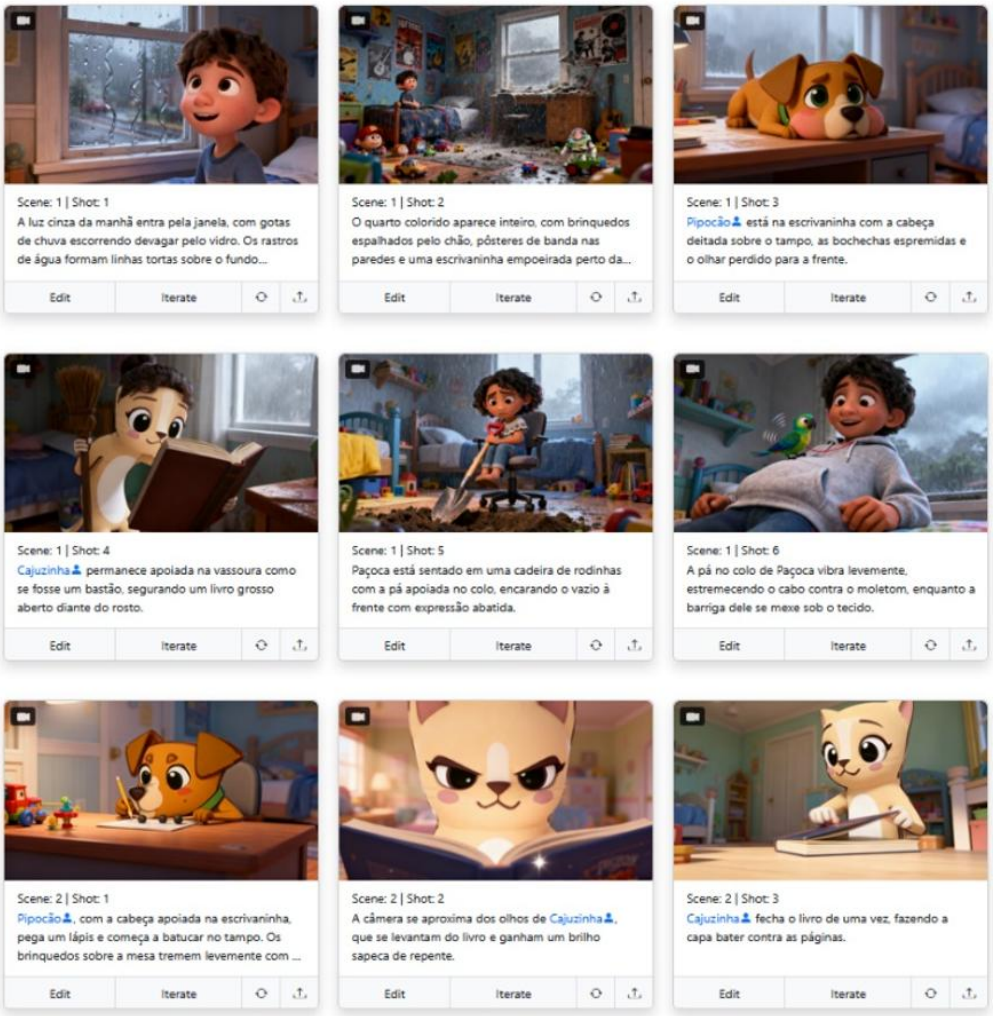


Source: Screenshot by the authors (2026).

Based on this script, the platform generates the project's shot list, wherein it is possible to edit the prompt for each frame, as well as the framing, perspective, camera movement, frame duration, focal length, and any other parameters the user may need to include. In line with the objective of practicality, the prompts were not edited, and the images were generated based solely on the A.I's interpretation of the original script. Once all prompts and specifications are established, the tool then generates the storyboard images, which can also be edited after completion. The result is visible in Figure 2 below.

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Figure 2. Results of storyboards generated by Storyboarder.ai



Source: Screenshot by the authors (2026).

At first impression, it is already possible to observe inconsistencies in the A.I's ability to interpret character designs. While the characters Cajuzinha and Paçoca were generated in a recognizable and consistent manner, the character Pipocão was interpreted as a human child (frames 2, 3, and 8) and, in frame 7, as a handful of popcorn with eyes and a mouth.

The phenomenon of artificial hallucinations mentioned previously is also evident. In this context, the tool not only misinterprets the script, but hallucinates visual information that is absent from the original text. Actions, objects, and even character traits are created or distorted without any correspondence to the provided input. This behavior is not limited to isolated errors; rather, it

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reveals a structural flaw in the A.I's ability to establish a reliable relationship between textual description and sequential visual representation, directly compromising the function of the storyboard as a planning tool.

This is a severe issue, as A.I hallucination does not present itself in an evident or flagged manner, but rather as a seemingly plausible outcome. In other words, the generated image may, at first glance, appear coherent or even technically well-executed. However, it introduces significant narrative inconsistencies. Within an audiovisual production context, this poses a risk since decisions may be made based on incorrect information. Unlike a human error, which tends to be localized, A.I hallucinations compromise the reliability of the system as a whole, rendering it unpredictable. Thus, rather than merely a technical limitation, it constitutes a critical impediment to its practical application in sensitive stages of pre-production, such as storyboard development.

Regarding agility, the Storyboarder.ai platform is fast and practical. Its interface is simple and intuitive, and in less than two minutes, it can produce up to nine frames free of cost, with the possibility of generating more frames if the user pays a subscription fee. As for clarity, when viewed individually, the frames show a clear distinction between characters; however, the actions performed and the movement of the characters are not easily identifiable, primarily lacking continuity from one frame to the next. Characters and objects appear and disappear, change positions without indication, and the backgrounds lack consistency, appearing with different layouts in each frame. Finally, regarding scene composition, it is observed that the A.I understands the technical knowledge of cinematographic composition, adhering to theories such as the rule of thirds, the balance of objects within the scene, and symmetry/asymmetry. However, a lack of diversity in the choice of framing and camera angles is noted. It is understood that, as an animated series meant for an audience aged 1–5 years, complex and highly varied framing is not strictly necessary. Nonetheless, when not specified by the script or the prompt, Storyboarder.ai demonstrates a tendency to depict characters in repetitive poses and in simple, individual framings.

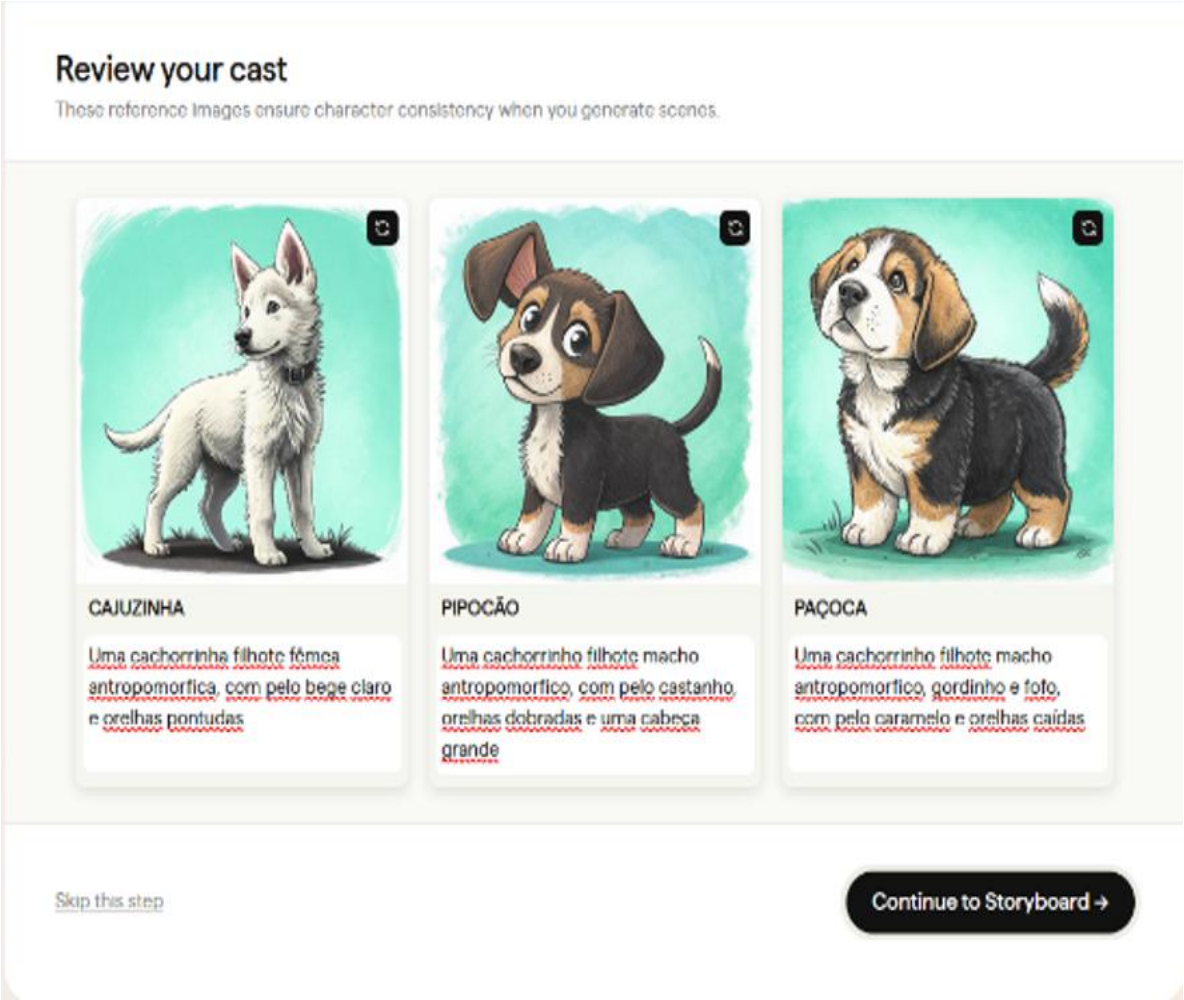
3.2. Boords

The second platform tested was Boords, which was also utilized in the prior study. Similar to Storyboarder.ai, Boords offers the option to import a pre-existing script, and the A.I automatically formats and interprets the scenes and dialogues. Subsequently, the user selects the drawing style for the storyboard (for this paper, the "Animation" option was selected). The platform also provides the option to create a character list through descriptions and prompts (Figure 3) but does not allow the user to upload an existing reference, thereby limiting the

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precision of the designs. It is possible to observe below how, in all three cases, the description of the characters as "anthropomorphic" was ignored by the A.I.

Figure 3. Boords character creator

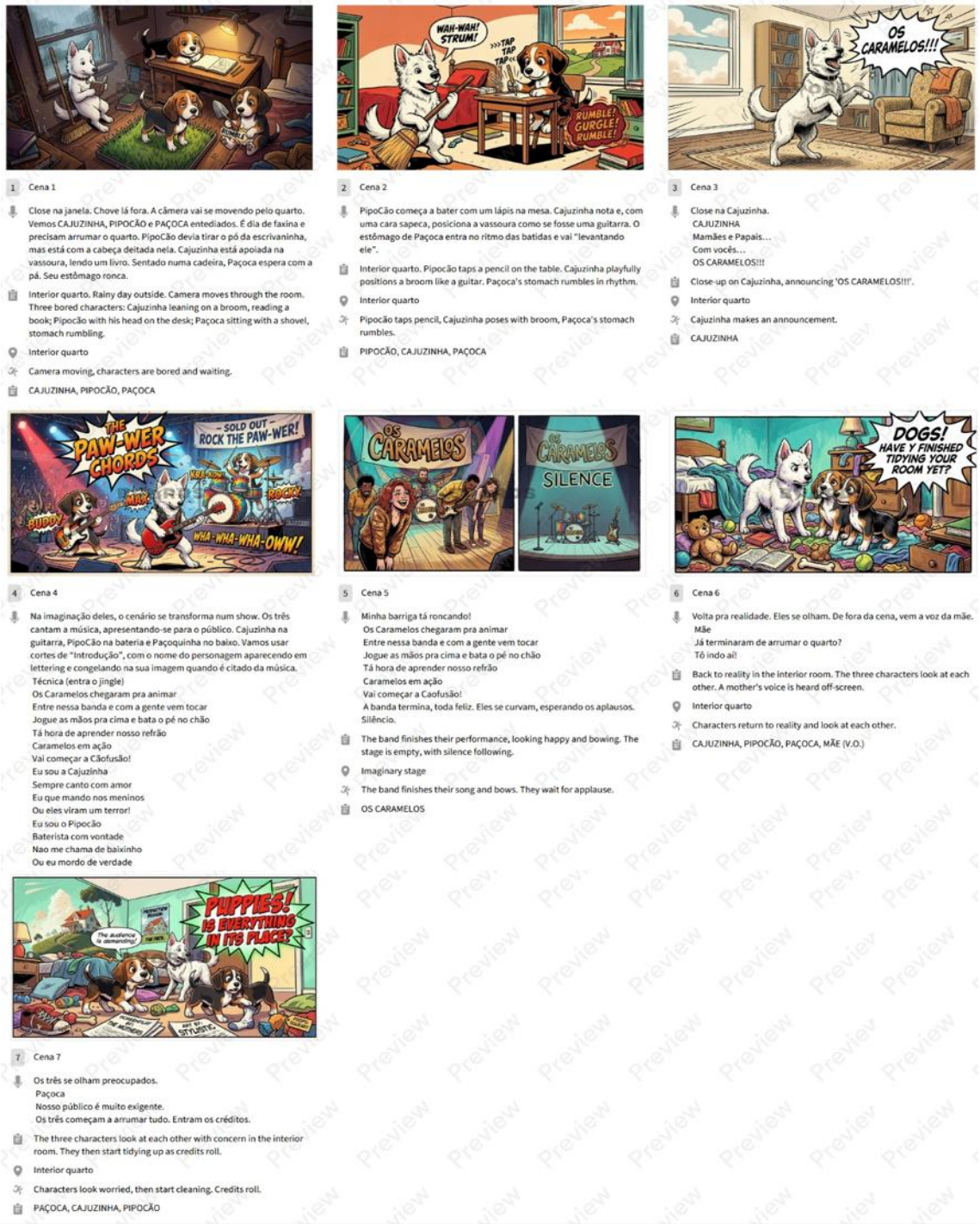


Source: Screenshot by the authors (2026).

Following the creation of the characters and the submission of the script, the tool generated a storyboard consisting of seven frames. The result can be observed in Figure 4 below.

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Figure 4. Results of storyboards generated by Boords



Source**:** Screenshot by the authors (2026).

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It is observed that, unlike the previous platform, there was no "hallucination" by the A.I regarding the sections of the script. The storyboard follows the submitted script without the addition of scenes, dialogues, or movements non-existent in the original. The captions beneath the images also demonstrate how the A.I interprets the scenes and the characters' emotions, which remained consistent with the original script. Similar to the previous tool, the creation of the storyboard was agile and efficient, requiring only a few minutes between the submission of the script and the generation of the final boards.

In functional terms, however, the storyboards prove to be inconsistent and disordered. There is little clarity regarding the characters' actions and how their movements transition from one scene to another. The backgrounds, designs, and the number of characters within the scene are also inconsistent; for instance, it includes an extra character (scene 1) or transforms them into humans (scene 5). It is also possible to note several errors pertinent to A.I-generated art, such as in scene 7, where one of the characters appears with a second body next to their head. Furthermore, it is noted that although the script and descriptions were in Portuguese, the A.I translated part of the annotations and some text within the images into English. Thus, it is presumed that a portion of the hallucinations may result from these automatic translations performed by the tool.

The composition of the scenes also leaves much to be desired. The tool reuses the same framings across almost all scenes, depicting the characters in a wide shot and full-body view, lacking variations to render the visuals more dynamic. There is also no consideration given to the emotional aspects of the scenes, fixing the camera far from the characters during moments of high emotion, such as when they are playing music or when they hear their mother's voice asking if they have finished tidying their room.

3.3. QuillBot

In the prior study, the tool named Storyboards.ai had been tested, yielding results similar to those of the other A.Is. However, after one year, the tool underwent several changes (now called Ciaro.pro) that hindered its accessibility, requiring payment for its most basic functions. Consequently, it no longer qualifies as a viable and accessible A.I for storyboard creation. Therefore, another website was selected for the third test.

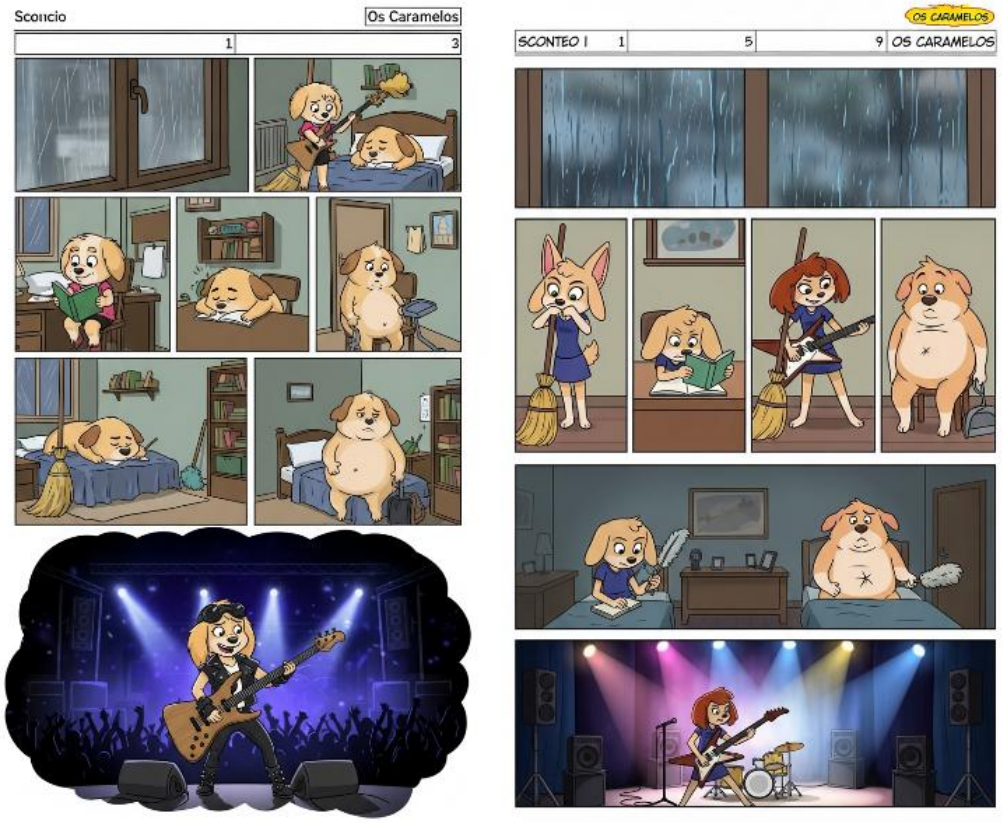
QuillBot is an artificial intelligence-based Natural Language Processing tool (NLP) specifically designed for paraphrasing and textual enhancement (Learneo, 2025). Since 2025, however, it has also offered A.I image generation and creation features, including a tool for storyboard creation currently in its beta testing phase. Due to its widespread accessibility,

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QuillBot's storyboard generation feature was chosen as the third testing tool, although, unlike the others, it is not intended for exclusive storyboard use and does not present as many features as Storyboarder.ai or Boords.

Its interface is simple and practical, allowing the user to write a prompt, select the drawing style for the storyboard, and choose the image aspect ratio. Following the same methodology as the others, the "3D Scene" style and the 16:9 aspect ratio were selected. The submitted prompt was as follows: "generate a sequential storyboard for an animated series, following the script below. The characters are three anthropomorphic puppy dogs. Cajuzinha is a female with pointy ears and light beige fur, Pipocão is a male with a large head and folded ears, and Paçoca is round and fluffy with floppy ears," followed by the transcription of the script presented in Appendix 1. The results generated are observable in Figure 5 below.

Figure 5. Results of storyboards generated by QuillBot



Source: Screenshot by the authors (2026).

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It is immediately clear that QuillBot does not possess the same text interpretation capability for storyboards as A.I platforms specialized for this task. There is no understanding whatsoever regarding background or character consistency. Scenes non-existent in the script were added, while other present scenes were omitted. It is also noticeable that common AI errors (e.g., anomalous anatomy, objects merging into one another, unidentifiable blurs, and inconsistent quality) are far more prevalent in this result.

Similar to the other tools, QuillBot could generate the storyboard in just a few moments. It is also free and allows the user to refine the prompt and try again up to three times at no cost in one day, rendering it more accessible than Storyboarder.ai or Boords. Its advantages, however, end in this regard. There is a lack of clarity concerning character movements. Furthermore, because their actions transition poorly between scenes and there is a lack of consistency in the backgrounds, a practical application of this storyboard for an actual production becomes difficult. On the other hand, the scene composition displays greater diversity in framings and proportions, even though there is little cohesion among them.

3.4. Human Artist

The storyboard in Figure 6 was created by a human artist within the Caramelos production team, using the ToonBoom Storyboard Pro 7 tool for drawing and editing. The storyboard underwent various edits and corrections in accordance with the development of the audio tracks and character modeling.

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Figure 6. Storyboard created by human artist



Source: Developed by a member of the “Os Caramelos” production team (2026).

Unlike those generated by the A.Is, it is visible how this storyboard faithfully follows each stage of the script: the rain against the window, the puppies bored and sleepy, the rise of energy

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as they begin to play music, the character introductions, and the mother's interruption of their imaginary show. The artist demonstrated agility, completing the rough drawings within a week, followed by several days of various modifications and video edits according to production needs and changes, which is a timeline compatible with this type of activity. The clarity of the artwork allows for the identification of all character movements as well as camera framings, ensuring a reliable interpretation by the production team.

Regarding composition, it successfully translates the essence of the script, bringing the desired emotion to the screen. Accurate focus is given to the props and instruments when necessary, and their body language transmits their emotions without the need for dialogue or audio. The three puppies are brought to life, establishing a connection among themselves and, more importantly, with the spectator, which is precisely what was envisioned by the screenwriter and the animation director.

The storyboard created by a human artist demonstrated a capacity to propose visual solutions that allow the animation team to follow the frames step-by-step, thereby saving time and expediting the process. In other words, it fulfills the primary function required of a storyboard.

4. CONCLUSION

The comparison between the results obtained in 2025 and those observed in this new study demonstrates that there have been visible advancements in artificial intelligence tools geared toward storyboard creation. The platforms are faster, more accessible, feature more intuitive interfaces, and, in some cases, offer greater capacity for visual customization, such as the ability to insert reference characters, select artistic styles, and achieve better automatic script organization. The aesthetic quality of the images has also shown significant improvement, increasingly approaching visually appealing and technically refined results.

However, the core problem remains the same: the A.I's inability to comprehend the storyboard as a functional pre-production tool rather than merely a sequence of aesthetically pleasing images. Although the platforms can generate visually pleasant compositions, they continue to fail in the aspects most crucial to professional practice: clarity of action, continuity between frames, spatial consistency, fidelity to the script, and the capacity to translate dramatic intent into efficient visual language. The main findings are summarized in Table 1 below:

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Table 1. Summarization of findings

Tool	Agility	Clarity	Composition
Storyboarder.ai	Final result in a few minutes	Lack of continuity and clarity in movement. Limited visual coherence and consistency.	Technically accurate, yet with limited framing diversity and no consideration for the narrative.
Boords	Final result in a few minutes	Inconsistent and disordered. High incidence of hallucinations.	Repetitive framings and no consideration for the narrative.
QuillBot	Final result in a few minutes	Inconsistent in character actions and designs. Limited coherence and lacking continuity between frames.	Repetitive framings and no consideration for the narrative.
Human artist	Final result may take between a few days and up to a few weeks, depending on the project's complexity and number of revisions.	Consistency among characters, their positions, and movements within the scene. Coherent with the narrative.	Diversity of framings and consideration for the narrative weight of each frame.

Source**:** Developed by the authors (2026).

The phenomenon of artificial hallucinations renders this problem even more severe. By inventing actions, modifying characters, ignoring crucial commands, or creating non-existent scenes, the A.I directly compromises the reliability of the storyboard as a planning instrument. In an audiovisual production, particularly in animation—where time, budget, and organization depend heavily on the precision of pre-production—this type of error ceases to be merely a technical limitation and represents a structural risk to the project.

Even tools that exhibited improvements, such as Storyboarder.ai, still demonstrate significant inconsistencies when confronted with the actual demands of team-based usage. Conversely, more generic platforms, such as QuillBot, reinforce that the generation of isolated images does not equate to the construction of a functional visual narrative. Storyboarding requires interpretation, narrative synthesis, and the ability to propose visual solutions—competencies that still depend heavily on human sensibility.

The storyboard produced by the human artist remains the only one capable of fully meeting the criteria of agility, clarity, and composition established by Boyd (2020). In addition to faithfully following the script, it allows for constant adjustments, conscious interpretations, and creative

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solutions aligned with the actual needs of the production. Unlike A.I, the artist does not merely execute images, but understands intent, pacing, emotion, and narrative purpose.

Therefore, it is concluded that, despite the rapid evolution of generative artificial intelligence, it does not yet replace human labor in the creation of professional storyboards. Its application may be useful as an initial visual support tool, for brainstorming, or for aesthetic experimentation, but not as a definitive solution for such a sensitive stage of pre-production. The storyboard remains a tool for thinking and planning, rather than merely for illustration, and within this process, the human perspective remains indispensable. Rather than asking whether A.I can draw better, the central question remains whether it can think narratively. Up to the present moment, the answer is still no.

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REFERENCES

ALKAISSI, H.; MCFARLANE, S. I. **Artificial Hallucinations in ChatGPT:** Implications in Scientific Writing. Cureus, 2023.

BORGES, C. Advogado é multado pelo TJSC por usar informações falsas geradas pelo ChatGPT em recurso. **G1**, Florianópolis, 20 fev. 2025.

BOYD, M. A. **A Guide to Storyboards!,** 2020.

CARVALHO, D. M. de; SAIA, I. N.; ROMEIRO, N. C.; VIEIRA, M. L. H. La eficacia de la IA para la creación de storyboards. **In:** CONGRESO INTERNACIONAL DE DISEÑO, 12., 2025, La Habana, Cuba. *Memorias XII Congreso Internacional de Diseño*. La Habana, Cuba: Forma Ediciones, 2025. p. 462-473.

GIL, A. C. **Como Elaborar Projetos de Pesquisa**. 6. ed. São Paulo: Atlas S.A., 2017.

JOVANOVIC, M.; CAMPBELL, M. Generative Artificial Intelligence: Trends and Prospects. **Computer**, v. 55, n. 10, p. 107–112, 2022.

LEARNEO. About QuillBot. Disponível em: <https://quillbot.com/about>. Acesso em: 13 maio 2026.

MCCORDUCK, P. **Machines who think:** a personal inquiry into the history and prospects of artificial intelligence. CRC Press, Taylor & Francis Group, 2019.

PARRIS, N. **Let's Learn Some Storyboarding.** 2020.

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ROUSSEAU, D. H.; PHILLIPS, B. R. **Storyboarding essentials**: how to translate your story to the screen for film, TV, and other media. Watson-Guptill Publishers, 2013.

SILVA, B. A. S. da. Arte e Inteligência Artificial: Perspectivas Éticas e Tecnológicas. **Polymatheia - Revista de Filosofia**, v. 17, n. 1, p. 134–151, 2024. Disponível em: <https://revistas.uece.br/index.php/revistapolymatheia/article/view/13170>. Acesso em: 13 maio 2026.

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