Analysis of the Effectiveness of Visual Language and Narrative in Conveying Value Propositions in Pitching Decks

Untung Rahardja[1] (iD), Mukti Budiarto[2] (iD), Konita Lutfiyah[3], Otniel Feliks Putra Wahyudi[4*] (iD), Istajib Kulla

Himmy Azz[5] (iD), Nur Azizah[6] (iD), Dwi Julianingsih[7] (iD)

[1]Doctoral of School of Computing, Universiti Teknologi Malaysia, Malaysia
[2]Faculty of Science and Technology, University of Raharja, Indonesia
[3]Dept. of School of Business, IPB University, Indonesia
[4,6,7]Faculty of Economics and Business, University of Raharja, Indonesia
[5]Faculty of Business, Universitas Insan Pembangunan Indonesia, Indonesia
[1]rahardjauntung@graduate.utm.my, [2]mukti@raharja.info, [3]qonita13qonita@apps.ipb.ac.id, [4]otniel@raharja.info,
[5]stajibhimmy@gmail.com, [6]nur.azizah@raharja.info, [7]dwi.julianingsih@raharja.info
*Corresponding Author

Article Info

ABSTRACT

A pitching deck is a strategic communication medium that plays a crucial role in delivering value propositions to prospective investors in a concise yet persuasive manner. The effectiveness of message delivery through a pitching deck is highly determined by the quality of the visual language and narrative employed. **This study** aims to analyze how visual elements such as color, typography, infographics, and iconography interact synergistically with the narrative structure to convey complex business values more intuitively and emotionally. **The methodology** used is a literature study with a thematic analysis approach of scientific sources published within the last five years. **The findings** indicate that consistent visual integration and structured narrative not only enhance audience understanding but also strengthen memory retention and emotional engagement with the presented business ideas. Specifically, this combined approach opens significant opportunities for the development of intelligent models capable of adaptively evaluating and recommending pitching deck designs with personalization. **The implications** of this study point to the need for communication decision support systems that focus not only on business content but also on how data driven technologies and algorithms can improve the quality of visual narrative elements as persuasive tools in the startup and investment world.

1. INTRODUCTION

In the dynamic and competitive startup ecosystem, the ability to effectively convey business ideas is a key factor in attracting investor attention [1]. One of the primary mediums used in this process is the pitching deck a concise presentation that summarizes the essence of the business, revenue model, target market, and the value proposition offered [2]. However, the success of a pitch is not determined solely by the strength of the business idea itself, but also by how that idea is communicated visually and narratively [3]. Visual

language which includes elements such as typography, color, iconography, infographics, and layout plays an important role in simplifying complex information and shaping perceptions of professionalism within a very limited time [4]. Meanwhile, the power of narrative serves as an emotional bridge between the presenter and the audience, helping to build a logical flow that outlines the problem, solution, and impact of the proposed business idea [5]. The synergistic combination of structured visuals and narrative can strengthen audience understanding and increase the likelihood of emotional engagement two critical aspects in investment decision-making [6]. In the advancement of contemporary communication technology, new approaches have emerged that integrate computational intelligence in designing business communication strategies [7]. Technologies such as natural language processing, audience preference modeling, and data-driven visualization now enable the development of adaptive communication systems that can dynamically compose or evaluate pitching decks according to investor characteristics [8]. This approach not only automates technical aspects of presentation design but also takes into account cognitive and affective factors in delivering business messages [9]. This study aims to explore the effectiveness of visual language and narrative in conveying value propositions through pitching decks, as well as to identify opportunities for developing intelligent systems that can enhance the quality of business communication [10]. Through a literature review and thematic analysis of recent studies, this article not only highlights conceptual aspects of visuals and storytelling but also opens a discussion space for integrating intelligent technology into communication design that is more adaptive, precise, and impactful [11].

This research aligns closely with Indonesia national agenda for digital transformation and startup ecosystem development. Initiatives such as the 1000 Startup Digital Movement and Startup Studio Indonesia, launched by the Ministry of Communication and Information Technology, aim to enhance startup capabilities in presenting innovative and persuasive business ideas through tools like pitching decks [12, 13]. These programs emphasize not only technical readiness but also communication strategy, which is crucial in investor engagement and market expansion. Additionally, the National Medium-Term Development Plan 2020–2024 highlights the strategic role of digital communication and creative human resources in improving innovation, entrepreneurship, and economic competitiveness [14]. The findings of this study, which examine how visual language and narrative strengthen value proposition delivery in pitch decks, support these policy directions by offering evidence-based recommendations to enhance startup communication performance.

2. LITERATURE REVIEW
2.1. Conceptual Foundations: Pitching Decks, Visual Language, and Narrative

A pitching deck is defined as a concise presentation medium (±10–15 slides) that summarizes the value proposition, business model, and growth strategy of a startup [15]. Early research confirms that strong visual elements significantly influence investment decisions, even surpassing the verbal content. Meanwhile, a logical storytelling structure, problem, solution, impac drives emotional engagement of investors and enhances message retention [16].

2.2. Visual Language: Cognitive Theory and Presentation Design

Studies on vividness and cognitive load show that consistent color schemes, clear typography, and concise infographics can reduce the audience cognitive load and accelerate content comprehension [17]. Laboratory experiments demonstrate the dominance of visual signals in evaluating business opportunities (visual dominance effect) [18]. In the computational domain, image aesthetic assessment algorithms based on vision-language models (CLIP) can now automatically predict slide design quality, expanding beyond traditional manual evaluation perspectives [19].

2.3. Narrative Storytelling and Investment Decisions

Organizational and entrepreneurship research emphasizes that narratives featuring a clear protagonist, emotional flow, and transformation positively affect funding intentions (tonyanguyen.com) [20]. Large-scale linguistic analyses find correlations between persuasive language styles and fundraising success rates, highlighting the importance of managing temporal framing and tone (lucid.now) [21].

2.4. Visual–Narrative Synergy

Recent literature highlights the interactive effect: visuals provide concrete representation, while narrative offers meaning and context [22]. Their synergy enhances perceptions of professionalism and audience memory [23].

2.5. Relevance to Sustainable Development Goals (SDGs)

The findings and thematic synthesis of this literature review also align with the broader global objectives outlined in the United Nations Sustainable Development Goals (SDGs), particularly SDG 8 (Decent Work and Economic Growth), SDG 9 (Industry, Innovation, and Infrastructure), and SDG 4 (Quality Education) [24]. In the context of SDG 8, the development of effective pitching decks plays a key role in fostering entrepreneurship and supporting startups to access investment, scale operations, and create job opportunities [25]. By enhancing communication strategies through well-designed visual and narrative elements, startups are more likely to secure funding, which contributes directly to sustainable economic growth and inclusive employment [26]. With respect to SDG 9, this study emphasizes innovation in business communication through the integration of intelligent design systems and data-driven presentation strategies [27]. The use of advanced tools such as artificial intelligence in evaluating and generating pitching decks reflects the shift towards smart infrastructure and sustainable industrialization driven by technology and creativity [28]. Furthermore, this study also contributes to SDG 4 by promoting knowledge development in design thinking, communication, and digital literacy [29]. The conceptual insights gained from analyzing visual language and storytelling provide educational value for future entrepreneurs, designers, and business students, helping them build stronger competencies in persuasive communication and strategic presentation [30]. Therefore, the insights from this literature review not only contribute to academic and professional practice but also support global efforts toward innovation-driven, inclusive, and sustainable development [31].

3.   METHODOLOGY

This study employs a descriptive qualitative research design with a literature study method to explore and analyze the effectiveness of visual language and narrative in delivering value propositions within pitching decks [32]. The descriptive qualitative design is chosen to provide a deep and detailed understanding of phenomena that are contextual and interpretive in nature, particularly those involving communication patterns, message construction, and visual representation in business settings [33]. Through the literature study method, this research draws upon various credible sources, including scientific articles, scholarly books, previous research findings, professional reports, and other academic publications [34]. This method enables the researcher to gather comprehensive insights from existing knowledge and systematically analyze different perspectives, models, and findings that have been established in related fields such as business communication, graphic design, marketing, and entrepreneurship [35]. The literature study does not involve direct field research or the collection of primary data from respondents [36]. Instead, it emphasizes the critical examination of previously documented information to identify key concepts, theories, and practical strategies used in the development of pitching decks [37]. This method allows the researcher to understand how visual elements, storytelling structures, and persuasive narratives contribute to shaping investors perceptions and decision-making processes [38]. Moreover, this approach supports the identification of relevant patterns, similarities, and differences across various academic discussions and industry practices [39]. It also highlights research gaps that could be addressed in future empirical studies. By integrating theoretical insights with examples from professional practice, this study offers a strong conceptual foundation for enhancing the quality of value proposition delivery in pitching materials [40]. The insights gained are expected to benefit not only academic discourse but also real-world applications, particularly for startups and early-stage businesses aiming to improve their investor communication strategies [41].
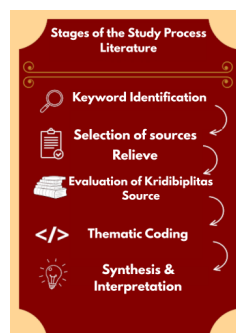

Figure 1. Stages of the Literature Study Process

The literature study process is a crucial preliminary stage in qualitative research, aimed at establishing a strong theoretical foundation. As illustrated in Figure 1, this process consists of several systematic stages. It begins with keyword identification, which ensures the retrieval of relevant academic sources. This is followed by the selection of sources, where researchers assess the relevance and scope of available literature. The relieve stage involves extracting significant information from the selected sources, which is then subjected to evaluation of source credibility to ensure academic reliability. The next phase is thematic coding, where recurring patterns and themes are identified. Finally, the process concludes with synthesis and interpretation, allowing researchers to integrate findings and formulate insights that guide the direction of the study. These structured stages ensure that the literature review is comprehensive, credible, and aligned with the research objectives.

- **Keyword Identification** Initially, relevant keywords and phrases related to the topic were identified to guide the literature search. Examples include "pitch deck," "visual communication," "business story-telling," "value proposition," and "investor presentation design." These keywords were selected to capture the broad scope of the study and ensure inclusion of pertinent academic and professional resources [42].

- **Literature Search** Using the identified keywords, extensive searches were conducted across major academic databases such as Google Scholar, ScienceDirect, SpringerLink, IEEE Xplore, and Taylor & Francis. The search aimed to collect relevant journal articles, conference proceedings, academic books, and business reports published within the last five years (2020–2025), ensuring the data reflects the most recent developments in visual communication and narrative strategies in pitching [43].

- **Selection and Screening of Literature** The collected literature underwent a selection process based on predefined inclusion criteria: topical relevance, publication year, peer-reviewed status, academic rigor, and full-text accessibility. Studies that did not meet these criteria were excluded to maintain the quality and relevance of the review [44].

- **Source Credibility Evaluation** Each source was critically appraised for its reliability and validity, favoring peer-reviewed journals and highly cited articles to ensure the findings incorporated are scientifically sound and trustworthy.

- **Data Extraction and Coding** Relevant information was extracted and categorized thematically based on key dimensions such as types of visual elements (color, typography, layout, infographics), narrative structures (story flow, emotional appeal, character usage), and how these components contribute to the clarity and persuasiveness of value propositions in pitching decks.

- **Thematic Synthesis** The coded data were synthesized to identify patterns, consistencies, and divergences across studies. This thematic analysis helped construct an integrative framework explaining how visual and narrative elements interact synergistically to enhance pitching deck effectiveness.

- **Drawing Conclusions** Finally, conclusions were drawn regarding the roles and impact of visual language and storytelling in pitching decks, supported by evidence from the literature synthesis. Practical implications and suggestions for pitching deck design were formulated based on these insights.

The literature review approach adopted in this study emphasizes narrative synthesis, aligning with the exploratory and conceptual objectives of understanding the interplay between visual and narrative communication in business presentations. By leveraging secondary data sources exclusively, this research circumvents the need for primary data collection, focusing instead on analyzing and integrating established knowledge from multiple high-quality academic works. This method enables a well-structured and transparent investigation, providing robust academic grounding for future empirical research and practical recommendations aimed at improving pitching deck communication strategies.

4. RESULTS AND DISCUSSION
4.1. Results

The literature study reveals that visual language significantly enhances the effectiveness of pitching decks in conveying value propositions to potential investors. Key visual elements such as consistent color

schemes, clear typography, infographics, and icons help simplify complex business information and increase the perceived professionalism of the presentation.

Table 1. The Role of Visual Elements in Enhancing Communication Effectiveness

Visual Elements	Main Functions	Impact on Audience
Consistent Color	Building identity and professionalism	Increasing visual credibility
Clear Typography	Make reading and focus easier	Reducing cognitive load
Infographics	Summarize data and insights visually	Accelerating understanding
The Power	Providing simple illustrations for concepts	Strengthen memory power

As presented in Table 1, it becomes evident that each visual component incorporated into a pitching deck serves a deliberate and strategic function aimed at enhancing the overall effectiveness of communication with potential investors. These visual elements are not merely decorative; rather, they are purposefully designed to support clarity, coherence, and persuasive intent. For instance, the use of consistent color schemes throughout the deck does more than just provide visual harmony. It conveys a sense of professionalism, attention to detail, and brand identity. Such consistency fosters positive psychological impressions and enhances the perceived credibility of the startup, which in turn can significantly influence investors trust and willingness to engage further. Beyond the visual components, narrative elements were also identified as fundamental to the persuasive strength of the pitching deck. These elements help structure the flow of information in a way that is both emotionally engaging and logically coherent. Through careful narrative design, startups are able to craft compelling stories that resonate with the experiences, expectations, and aspirations of potential investors. This emotional connection is particularly critical in early-stage funding, where decisions often rely not only on hard data but also on the strength of the story being told. From the synthesis of the reviewed literature, five core narrative components emerged as the most frequently cited and influential. These include: (1) a well-defined story structure that guides the audience through a beginning, middle, and end; (2) clear articulation of the problem being addressed and the solution being offered; (3) use of emotional appeal to generate empathy and interest; (4) the presence of a central character, often the founder or user, who personalizes the journey; and (5) demonstration of impact or transformation that results from the proposed solution. Each of these elements contributes to building a memorable and convincing presentation that appeals to both the logic and emotions of the audience. The distribution and frequency of these narrative components, as identified across multiple scholarly sources and case analyses, are visualized in the bar chart provided below. This visual representation further supports the conclusion that the integration of narrative techniques is a key differentiator in the perceived effectiveness of a pitch deck, underscoring the importance of storytelling in the entrepreneurial communication process.
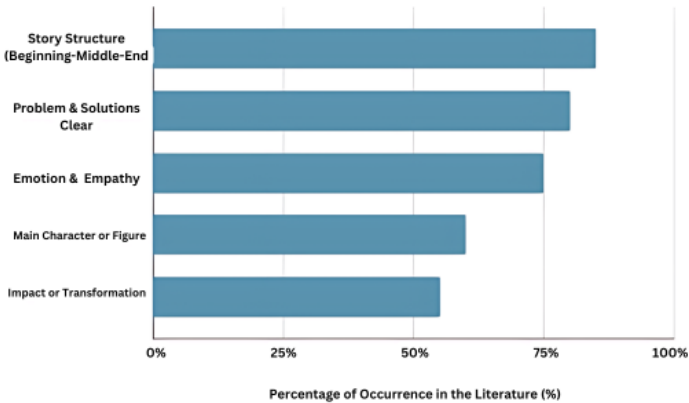

Figure 2. Most Frequently Found Narrative Factors in the Literature

As seen in Figure 2, a coherent story structure appears in 85% of the sources, highlighting its fundamental role in investor comprehension. Emotional appeal and clear problem solution framing also feature prominently, underlining the importance of connecting with the audience both logically and emotionally. Importantly, the synergy between visual language and narrative storytelling amplifies the overall impact of pitch-

ing decks. When these elements are effectively combined, they not only clarify the business proposition but also make the presentation more memorable and persuasive.

4.2. Discusion

The findings clearly emphasize that visual elements within pitching decks are not simply decorative in nature, but function as essential tools that support and enhance cognitive processing. These visual components contribute meaningfully to how information is received, interpreted, and retained by potential investors. When visual aspects are applied strategically, they improve the overall clarity of the presentation and reduce unnecessary distractions. For example, the use of a consistent color scheme does more than provide aesthetic uniformity; it also reinforces the identity of the brand and conveys a sense of professionalism and reliability. Likewise, the implementation of professional and legible typography helps organize information in a way that is easy to read and follow, reducing the mental effort required by the audience to absorb the presented material. Visual aids such as infographics, icons, and simplified charts allow complex data to be condensed into formats that are easier to understand. These elements transform raw data into visual narratives that support rapid comprehension, especially in situations where time for explanation is limited. This kind of design approach allows the core message to be communicated more efficiently and effectively, enabling investors to focus their attention on evaluating the potential of the business rather than decoding difficult or cluttered content. In addition to visual components, narrative strategies were found to play a critical role in reinforcing the persuasive power of a pitching deck. A well-structured narrative helps to connect individual slides into a coherent story, creating a sense of flow and progression. The presence of clearly defined problems and corresponding solutions gives structure and logic to the overall message, while emotional appeal and relatable characters generate a sense of empathy and human connection. When the audience can emotionally relate to the journey being presented whether through the story of the founder, a user, or a societal impact it becomes easier for them to trust the vision and values behind the business. Together, these visual and narrative strategies produce a complete communication experience that appeals to both logical reasoning and emotional engagement. Visual elements offer concrete representations of key ideas, brand messages, and performance metrics, while narrative elements give these visuals meaning, context, and direction. This combination makes the presentation not only more persuasive, but also more memorable and impactful. It increases the chances that the startup will leave a lasting impression on potential investors and receive a favorable response.

To illustrate this integrated approach, the following Venn diagram presents the complementary roles of visual language and narrative components in shaping an effective pitching deck. Each component contributes uniquely, but their overlap creates a powerful zone of influence where clarity, emotional connection, and trust intersect.
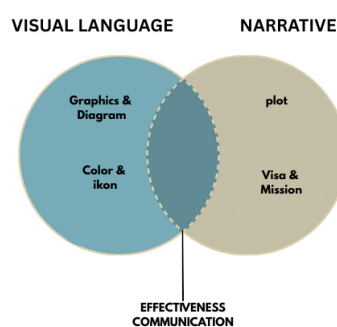

Figure 3. Synergy of Visual Language and Narrative in Pitching Deck

Effective communication in startup pitching relies not only on verbal or narrative elements but also on the strategic use of visual language. As shown in Figure 3, a synergistic relationship between visual language and narration significantly enhances the overall impact of a pitching deck. Visual language, which includes elements such as graphics, diagrams, colors, and icons, contributes to clarity, engagement, and aesthetic appeal. Meanwhile, narration encompasses plot structure and the articulation of a startup vision and mission, offering coherence and emotional resonance. The intersection of these two dimensions forms the basis for effective

communication, enabling the audience to process information more intuitively and persuasively. This integrated approach is essential in investor presentations, where both logical clarity and emotional appeal are critical to influencing decision-making.
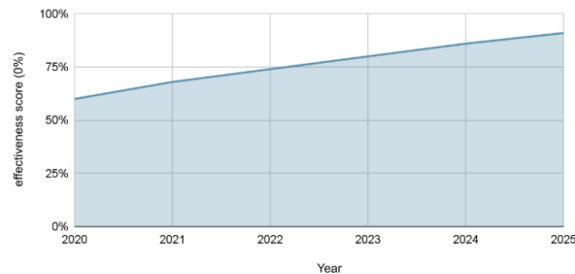

Figure 4. Trend of Increasing Effectiveness of Visual-Narrative Pitch Decks (2020–2025)

The growing emphasis on combining visual and narrative elements in pitch presentations has demonstrated measurable benefits over time. As illustrated in Figure 4, the effectiveness score of visual narrative pitch decks has shown a consistent upward trend from 2020 to 2025. This steady increase, from approximately 60% in 2020 to over 90% in 2025, reflects the evolving preferences of audiences particularly investors who value clarity, coherence, and emotional engagement. The integration of compelling visuals with structured storytelling not only enhances message retention but also strengthens persuasive impact, making such pitch decks more effective in communicating business ideas and securing stakeholder interest.

5. MANAGERIAL IMPLICATIONS

The study highlights the strategic role of visual design as more than just aesthetic enhancement; it serves as a critical communication tool that shapes investor perception. Managers should ensure that pitching decks incorporate consistent brand colors, clear typography, and well-crafted data visualizations to strengthen clarity and professionalism. These elements help establish credibility and facilitate better understanding of complex business ideas.

Narrative construction is equally important in creating emotional engagement and building trust. A clear and compelling story that outlines the problem, solution, and potential impact allows investors to connect with the business on a deeper level. It is essential for managers to foster storytelling skills within pitching teams to enhance the persuasive effect of their presentations. An integrated approach where visual language and narrative storytelling reinforce each other significantly improves communication effectiveness. Collaboration between visual designers and content developers should be encouraged to produce cohesive and memorable pitches. This synergy supports both rational comprehension and emotional connection, increasing the chances of investor interest.

Incorporating iterative feedback processes, such as trial presentations to selected audiences, enables refinement of both visual and narrative components. This practice helps identify weaknesses and optimize the overall impact of the pitching deck. Adopting these insights provides businesses with a competitive edge in attracting funding, facilitating growth, and ensuring sustainability. Improving the quality of communication in pitching decks should be considered a key management priority in entrepreneurial ventures.

6. CONCLUSION

This study confirms that the combined use of visual language and narrative storytelling plays a crucial role in enhancing the effectiveness of pitching decks, particularly in conveying value propositions to potential investors. Visual elements such as consistent color schemes, clear typography, and well-designed infographics significantly improve audience comprehension by simplifying complex information and reinforcing brand professionalism. At the same time, a structured and emotionally engaging narrative helps build trust and establish a strong connection between the presenter and the audience. The synergy between visual and narrative components creates a holistic communication experience that not only clarifies the business proposition but also leaves a lasting impression. This integration increases investor engagement, making the pitch more memorable

and persuasive, thereby improving the chances of securing funding. The methodology based on a systematic literature study provides a comprehensive understanding of these dynamics, grounded in empirical and theoretical evidence. These findings emphasize that successful pitching requires more than just solid business content; it demands careful attention to how the message is visually and verbally delivered. Entrepreneurs and managers should prioritize developing both design quality and storytelling skills to maximize the impact of their presentations. Future research could extend these insights by exploring the practical application of these strategies across different industries and cultural contexts, as well as by conducting empirical studies to validate the observed effects. Integrating visual language with compelling narrative storytelling is essential for effective communication in pitching decks, offering a powerful approach to conveying value propositions and influencing investment decisions.

7. DECLARATIONS

7.1. About Authors

Untung Rahardja (UR) iD https://orcid.org/0000-0002-2166-2412

Mukti Budiarto (MB) iD https://orcid.org/0000-0003-2205-2437

Konita Lutfiyah (KL) iD -

Otniel Feliks Putra Wahyudi (OW) iD https://orcid.org/0009-0007-8196-4483

Istajib Kulla Himmy Azz (IA) iD https://orcid.org/0000-0002-9937-7136

Nur Azizah (NA) iD https://orcid.org/0000-0002-5333-5520

Dwi Julianingsih (DJ) iD https://orcid.org/0000-0002-6257-4881

7.2. Author Contributions

Conceptualization: UR; Methodology: KL; Software: MB; Validation: IA and NA; Formal Analysis: DJ and OW; Investigation: MB; Resources: DJ; Data Curation: UR; Writing Original Draft Preparation: DJ and OW; Writing Review and Editing: IA and NA; Visualization: MB; All authors, UR, MB, KL, OW, IA, NA and DJ, have read and agreed to the published version of the manuscript.

7.3. Data Availability Statement

The data presented in this study are available on request from the corresponding author.

7.4. Funding

7.5. Declaration of Conflicting Interest

The authors declare that they have no conflicts of interest, known competing financial interests, or personal relationships that could have influenced the work reported in this paper.

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