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RESEARCH ARTICLE

DeepSeek vs. ChatGPT: A Comparative Evaluation of AI Tools in Composition, Business Writing, and Communication Tasks

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Abstract: This study presents a comparative evaluation of DeepSeek and ChatGPT, two AI-powered text generation models, in composition, business writing, and communication tasks. The article assesses AI-generated content based on clarity, coherence, adaptability, persuasiveness, and grammatical accuracy, with evaluations conducted by three expert instructors. The findings indicate that ChatGPT outperforms DeepSeek, particularly in linguistic variation, audience awareness, and dynamic content generation. ChatGPT demonstrates superior tone modulation, rhetorical adaptability, and engagement, making it more effective for persuasive messaging, business communication, and content creation. In contrast, DeepSeek excels in grammatical precision, structural organization, and factual consistency, making it a more reliable tool for formal reports and standardized business writing. The study also examines the strategies employed by both AI models, highlighting ChatGPT's strength in customizing responses to different audiences and business contexts, while DeepSeek often follows a one-size-fits-all approach, resulting in rigid and impersonal writing. Although ChatGPT proves more adaptable, its responses occasionally require refinement for conciseness and formality, whereas DeepSeek would benefit from improvements in creativity, emotional intelligence, and flexibility. The findings underscore the broader implications of AI-driven writing tools in business, education, and professional communication. Organizations can maximize AI's potential by leveraging ChatGPT for dynamic and persuasive communication while utilizing DeepSeek for structured, technical, and compliance-based writing. Future advancements should focus on enhancing AI adaptability, domain-specific customization, and ethical considerations in AI-generated content, ensuring effective integration into modern professional environments.

Keywords: AI writing tools; ChatGPT; DeepSeek; business communication; text generation

I. INTRODUCTION

In the rapidly evolving landscape of artificial intelligence (AI), natural language processing (NLP) models have emerged as transformative tools for composition, communication, and business writing [1]. Among the most popular AI-driven platforms are DeepSeek and ChatGPT, which have garnered significant attention for their ability to generate human-like text, streamline workflows, and enhance productivity in professional settings. As organizations increasingly rely on AI to draft emails, create reports, develop marketing content, and facilitate internal and external communication, understanding the strengths and limitations of these tools becomes critical. This article aims to comprehensively analyze DeepSeek and ChatGPT, focusing on their applications in composition, business writing, and communication. By examining their capabilities, performance, and practical utility, this study seeks to inform professionals, researchers, and decision-makers about which tool may better suit their needs.

The advent of AI-powered writing tools has revolutionized the way businesses approach communication [2]. Traditional methods of drafting documents, crafting marketing campaigns, and managing correspondence often require significant time and effort, leaving room for human error and inefficiency. AI models like DeepSeek and ChatGPT offer a solution by automating these processes, enabling users to generate high-quality content in a fraction of the time. However, not all AI tools are created equal. While ChatGPT, developed by OpenAI, has become a household name due to its versatility and widespread adoption, DeepSeek represents a newer, potentially more specialized contender in the field.

Business writing encompasses various activities, from formal reports and proposals to informal emails and social media posts [3]. Each task demands a unique combination of clarity, tone, and precision, making it essential for AI tools to adapt to diverse contexts. ChatGPT, with its extensive training on a vast corpus of text, excels in generating coherent and contextually appropriate responses across a broad spectrum of topics. Its ability to mimic human language and provide detailed explanations has made it a popular choice for businesses seeking to enhance their communication strategies. On the other hand, DeepSeek, while less widely known, may offer specialized features or optimizations that cater to business environments. This study investigates whether DeepSeek's approach provides a competitive edge regarding accuracy, relevance, and user experience.

Communication in business settings is not solely about generating text; it also involves understanding and addressing the needs of diverse stakeholders [4]. Effective communication requires empathy, cultural sensitivity, and the ability to convey complex ideas clearly and concisely [5]. AI tools must, therefore, go beyond mere text generation to offer insights, suggestions, and improvements that align with organizational goals. ChatGPT's conversational abilities and contextual awareness have set a

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high standard in this regard. However, DeepSeek's potential for customization and industry-specific applications warrants closer examination. By comparing the two platforms, this study aims to identify which tool better supports the multifaceted demands of modern business communication.

Another critical aspect of this comparison is the user experience, including ease of use, integration with existing workflows, and the ability to produce consistent results [6]. ChatGPT's user-friendly interface and extensive documentation have contributed to its widespread adoption, but DeepSeek's design philosophy and feature set may offer advantages in specific use cases. For instance, businesses operating in highly regulated industries or those requiring specialized terminology may find DeepSeek's tailored approach more appealing. This study evaluates the usability and practicality of both tools, considering factors such as learning curves, customization options, and the ability to handle complex or niche requirements.

Ethical considerations also play a significant role in adopting AI tools for composition, business writing, and communication [7]. Issues such as data privacy, bias in language generation, and the potential for misuse must be carefully addressed to ensure responsible deployment [8]. DeepSeek and ChatGPT operate within frameworks designed to mitigate these risks, but their approaches and effectiveness may differ. This study explores the ethical implications of using each platform, providing insights into how businesses can leverage AI responsibly while minimizing potential downsides.

The rise of AI-powered writing tools like DeepSeek and ChatGPT represents a paradigm shift in how businesses approach communication and content creation. While both platforms offer compelling features, their suitability for specific tasks and industries may vary. This article bridges the theoretical potential and practical application gap by comparing DeepSeek and ChatGPT in composition, business writing, and communication. By shedding light on their respective strengths, limitations, and areas for improvement, this study aims to contribute to the growing body of knowledge on AI-driven communication tools and their role in shaping the future of business.

II. LITERATURE REVIEW

The integration of AI into business communication and writing has been a subject of growing interest among researchers and practitioners alike [9]. As organizations increasingly adopt AI-powered tools to streamline workflows and enhance productivity, understanding the capabilities and limitations of these technologies becomes essential. This literature review explores existing knowledge on AI-driven writing tools, focusing on NLP like ChatGPT and emerging platforms such as DeepSeek. By examining prior research, this section provides a foundation for the comparative analysis of these tools in business writing and communication.

The evolution of AI in communication can be traced back to early developments in NLP and machine learning [10]. According to [11], NLP has undergone significant advancements over the past decade, driven by the emergence of transformer-based models like OpenAI's GPT series. These models, which leverage large-scale datasets and sophisticated algorithms, have demonstrated remarkable capabilities in generating human-like text and understanding context. ChatGPT, a descendant of the GPT-3.5 and GPT-4 architectures, has been widely studied for its applications in various domains, including business communication. Studies by [9,12] highlight the model's ability to produce coherent and contextually relevant responses, making it a valuable tool for drafting emails, creating reports, and generating marketing content.

In business writing, AI tools like ChatGPT have been praised for saving time and reducing the cognitive load on professionals [12–14]. A study by [15] found that AI-powered systems can significantly enhance productivity by automating repetitive tasks and providing real-time suggestions for improving written communication. Similarly, research by [16] emphasizes the role of AI in facilitating collaboration and knowledge sharing within organizations. These findings underscore the potential of ChatGPT and similar platforms to transform traditional business practices, enabling teams to focus on higher-value activities while delegating routine writing tasks to AI.

The adoption of AI in business communication is not without challenges. One of the primary concerns raised in the literature is the issue of bias in AI-generated content. [17] noted that language models trained on large datasets may inadvertently perpetuate stereotypes or produce biased outputs, which can have ethical implications for businesses. To address this, researchers have called for greater transparency in AI development and safeguards to mitigate bias. For instance, OpenAI has introduced guidelines and fine-tuning techniques to reduce harmful outputs in ChatGPT [18]. Despite these efforts, the potential for bias remains a critical consideration for organizations using AI tools in their communication strategies.

Another concern is the ability of AI models to handle specialized or industry-specific language. While ChatGPT excels in generating general-purpose text, its performance in niche domains may be limited. According to a study by [19], domain-specific fine-tuning and customization are essential for optimizing AI tools for specialized applications. This is where emerging platforms like DeepSeek may offer advantages. Although DeepSeek has not been as extensively studied as ChatGPT, its design philosophy prioritizes customization and adaptability, making it a promising candidate for businesses with unique communication needs. Further research is needed to explore and compare DeepSeek's capabilities with established models like ChatGPT.

The user experience of AI-powered writing tools is another critical factor influencing their adoption in business settings. Research by [20,21] highlights the importance of usability, ease of integration, and perceived usefulness in determining the success of technology adoption. ChatGPT's user-friendly interface and extensive documentation have contributed to its widespread popularity, but DeepSeek's approach to user experience remains less explored. A study by [22] suggests that professionals will likely embrace AI tools with intuitive interfaces and robust support systems, underscoring the need for further investigation into DeepSeek's usability and integration capabilities.

Ethical considerations also play a significant role in deploying AI tools for business communication [23]. As highlighted by [24], using AI raises important questions about data privacy, accountability, and potential misuse. Businesses must navigate these challenges carefully to ensure responsible AI adoption. For example, ChatGPT's data handling practices and privacy policies have been scrutinized by researchers and policymakers alike [18]. DeepSeek, as a newer entrant in the field, may face similar scrutiny, mainly if it aims to cater to industries with stringent regulatory requirements. This study explores both platforms' ethical frameworks, providing insights into how businesses can leverage AI responsibly.

The practical applications of AI in business writing and communication have been widely documented in the literature.

For instance, a case study by [25] demonstrates how AI tools can enhance customer engagement by generating scale-based personalized content. Similarly, research by [26] highlights the role of AI in improving internal communication and knowledge management within organizations. These studies underscore AI's transformative potential in addressing daily challenges businesses face, such as maintaining consistency in communication and managing large volumes of content. However, the effectiveness of AI tools may vary depending on the specific use case, necessitating a comparative analysis of platforms like ChatGPT and DeepSeek.

In addition to their applications in business writing, AI tools have been studied for their impact on creativity and innovation. A study by [27] suggests that AI can augment human creativity by providing new perspectives and generating ideas that may not have been considered otherwise. ChatGPT's ability to produce diverse and imaginative outputs has been praised for its potential to inspire creative thinking [28,29]. However, DeepSeek's approach to fostering creativity remains an area for exploration. By comparing the two platforms, this study aims to shed light on their contributions to creative problem-solving and innovation in business contexts.

The literature also highlights the importance of continuous learning and adaptation in AI models. As [12] noted, machine learning algorithms must evolve to keep pace with changing user needs and emerging trends. ChatGPT's iterative development process, which incorporates user feedback and regular updates, exemplifies this principle [18]. While less documented, DeepSeek's approach to learning and adaptation may offer unique responsiveness and customization advantages. This study examines how both platforms address the need for continuous improvement, providing insights into their long-term viability as business tools.

Finally, the economic implications of adopting AI-powered writing tools have been interesting for researchers. A study by [30] estimates that AI could contribute up to $13 trillion to the global economy by 2030, with significant benefits accruing to businesses that leverage AI for communication and content creation. However, the cost of implementing and maintaining AI systems must be weighed against their potential returns. While ChatGPT's pricing model and accessibility have made it a popular choice for businesses of all sizes, DeepSeek's cost structure and value proposition remain unclear.

The existing literature provides a robust foundation for understanding the role of AI in business writing and communication. While ChatGPT has been extensively studied for its versatility and performance, emerging platforms like DeepSeek present new opportunities and challenges warrant further investigation. By synthesizing prior research and identifying gaps in the literature, this study aims to contribute to a deeper understanding of how AI tools can be effectively utilized in professional settings. The comparative analysis of DeepSeek and ChatGPT seeks to inform businesses, researchers, and policymakers about these platforms' strengths, limitations, and potential applications, ultimately advancing the field of AI-driven communication.

III. METHODOLOGY

This study employs a structured and systematic approach to compare the performance of DeepSeek and ChatGPT in composition, business writing, and communication. The methodology is designed to ensure objectivity, reliability, and validity when evaluating the capabilities of both AI tools. The research process involves three main phases: (1) prompt design and data collection, (2) evaluation by expert graders, and (3) comparative analysis of strategies used by DeepSeek and ChatGPT.

A. PHASE 1: PROMPT DESIGN AND DATA COLLECTION

The first phase involves creating standardized prompts that reflect common business writing and communication tasks. These prompts are categorized into three types: essays, business emails, and communication scenarios. Each category tests different aspects of the AI tools' capabilities, such as clarity, tone, structure, and adaptability to context.

- **Essay Prompts**: These prompts require AI tools to generate well-structured essays on topics relevant to business, such as leadership, marketing strategies, or ethical dilemmas in the workplace. For example, a prompt might ask, 'Discuss the impact of remote work on team collaboration and productivity. Write a five-paragraph essay.'
- **Business Email Prompts**: These prompts simulate real-world scenarios where the AI tools must draft professional emails. Examples include writing a follow-up email after a meeting, responding to a client inquiry, or addressing an internal team about a policy change.
- **Communication Prompts**: These prompts test the AI tools' ability to handle nuanced communication tasks, such as crafting a persuasive message, resolving a conflict, or delivering bad news to stakeholders. For instance, a prompt might ask, 'Write a message to employees explaining a delay in project deadlines due to unforeseen circumstances.'

The same set of prompts is provided to both DeepSeek and ChatGPT to ensure consistency in the evaluation process. Each tool generates responses independently, and the outputs are recorded for further analysis.

B. PHASE 2: EVALUATION BY EXPERT GRADERS

The second phase involves the evaluation of the generated responses by a panel of expert graders. The graders are experienced composition, business writing, and communication instructors, ensuring that the assessments are informed by professional expertise. The evaluation criteria are divided into three dimensions:

- **Composition**: This dimension assesses the generated text's overall structure, coherence, and readability. Graders evaluate whether the response has a clear thesis, body, conclusion, and logical transitions between ideas. The rubric is provided in Table I.
- **Business Writing**: This dimension focuses on the appropriateness of the tone, style, and language for a business context. Graders assess whether the response adheres to professional standards, avoids jargon or overly casual language, and effectively conveys the intended message. The grading rubric is provided in Table II.
- **Communication Effectiveness**: This dimension evaluates the response's ability to achieve its communicative purpose. Graders consider clarity, persuasiveness, empathy, and adaptability to the target audience. The rubric is provided in Table III.

Each response is graded using these rubrics, with scores assigned for each dimension. The graders work independently to minimize bias, and their scores are aggregated to determine DeepSeek and ChatGPT's overall performance for each prompt.

Table I. Essay grading rubric

Category	Excellent (18–20 points)	Good (14–17 points)	Satisfactory (10–13 points)	Needs Improvement (0–9 points)
Thesis/ Argument	Clear, focused, and well-developed thesis. This is an insightful and original argument.	The thesis is present and generally transparent. The argument is somewhat focused.	Weak or unclear thesis. The argument is underdeveloped or lacks focus.	No clear thesis or argument was presented.
Organization and Structure	Well-organized with a clear, logical flow. Strong introduction and conclusion.	Clear organization but awkward transitions or underdeveloped ideas.	Somewhat unclear, the organization is challenging to follow.	It lacks clear organization or structure and is hard to follow.
Evidence and Support	Strong, relevant evidence with detailed and convincing analysis.	There is relevant evidence, but the analysis may be lacking or weak at some points.	Insufficient or poorly connected evidence. Limited analysis.	Lacks clear evidence or does not support the thesis effectively.
Writing Style and Voice	Clear, engaging, appropriate academic writing. Strong, consistent voice.	Mostly clear writing, but lacks engagement or consistency in style.	Unclear or awkward writing. Inconsistent or inappropriate tone.	Unclear writing that is difficult to understand or lacks consistency.
Grammar, Mechanics, and Syntax	Virtually no errors in grammar, punctuation, spelling, or syntax. Well-crafted sentences.	There are few grammar, punctuation, or spelling errors—minimal impact on readability.	Noticeable errors in grammar, punctuation, or spelling. Some difficulty with readability.	Frequent errors that significantly impact readability and comprehension.
Citation and Formatting	Proper use of citation style (APA, MLA, etc.) and consistent formatting.	Minor citation or formatting errors, but overall consistent.	Multiple citation or formatting errors exist, but the structure is mostly intact.	Incorrect or missing citations and significant formatting errors.

Table II. Business writing grading rubric

Category	Excellent (18–20 points)	Good (14–17 points)	Satisfactory (10–13 points)	Needs Improvement (0–9 points)
Adherence to Professional Standards	The writing fully meets professional standards. The tone, format, and structure are formal and appropriate for business communication.	The writing mostly meets professional standards, but some minor deviations in tone, format, or structure may be present.	Writing is somewhat professional but includes some informal or inappropriate elements.	Writing does not adhere to professional standards: informal tone, improper structure, or irrelevant elements.
Language Clarity & Precision	Language is clear, concise, and precise. The message is easy to understand with no ambiguity.	Language is primarily clear but may include occasional vagueness or unnecessary detail.	Language is unclear or vague, making it harder to understand the intended message.	Language is unclear, overly vague, or wordy, hindering the message's effectiveness.
Avoidance of Jargon/Overly Casual Language	No jargon or casual language. The writing is appropriate for a professional setting and easily understood by a broad audience.	There is minimal jargon or overly casual language, but the message is still clear and professional.	Some jargon or casual language is used, affecting the professionalism or clarity of the message.	Excessive jargon or casual language makes the message difficult to understand and unprofessional.
Effectiveness in Conveying Message	The response effectively conveys the intended message with firm supporting details and clarity.	The response conveys the message clearly but could benefit from more substantial supporting details or a more explicit focus.	The response conveys a basic message without clarity, detail, or focus.	The response does not effectively convey the intended message or lacks clear focus.
Tone and Formality	The tone is consistently professional, formal, and appropriate for the business context.	The tone is primarily professional, but there may be occasional lapses in formality.	The tone is inconsistent, with a mix of formal and informal elements.	The tone is inappropriate for the business context (e.g., overly informal or too harsh).

C. PHASE 3: COMPARATIVE ANALYSIS OF STRATEGIES

The final phase involves a detailed comparison of the strategies employed by DeepSeek and ChatGPT to generate their responses. This analysis focuses on identifying patterns, strengths, and weaknesses in the approaches used by each tool. Key aspects of the analysis include:

- **Content Generation**: How do DeepSeek and ChatGPT approach generating content? Do they rely on pre-existing templates or adapt dynamically to the prompt? Are there differences in the depth and breadth of the information provided?
- **Tone and Style**: How do the tools handle tone and style in different contexts? For example, do they adjust their tone appropriately for formal emails versus persuasive messages? Are there noticeable differences in their ability to mimic human-like communication?
- **Adaptability to Context:** How well do the tools adapt to the specific requirements of each prompt? Do they understand the task's audience, purpose, and nuances? Are there instances

Table III. Communication effectiveness grading rubric

Category	Excellent (18–20 points)	Good (14–17 points)	Satisfactory (10–13 points)	Needs Improvement (0–9 points)
Clarity	The message is obvious, concise, and free from ambiguity. The content is easy to follow and understand.	The message is straightforward, but some parts may be slightly wordy or require clarification.	The message is somewhat unclear, with some sections confusing or lacking focus.	The message is unclear, complex, or confusing in multiple areas.
Persuasiveness	The highly persuasive response presents compelling arguments and substantial evidence to support the position.	The response is somewhat persuasive, but some arguments may be weak or not fully supported.	The response lacks persuasiveness, with weak or poorly supported arguments.	The response is not persuasive, with little to no supporting evidence or compelling arguments.
Empathy	The tone and content demonstrate a deep understanding of the audience's needs, concerns, and perspectives.	The response acknowledges the audience's needs but may lack depth in understanding or empathy.	The response shows limited empathy for the audience's needs or concerns.	The response lacks empathy or understanding of the audience's needs or concerns.
Adaptability to Target Audience	The response perfectly suits the target audience's level, preferences, and expectations.	The response is generally adapted to the audience but may not fully align with their needs or preferences.	The response is somewhat generic and not entirely suited to the audience.	The response fails to adapt to the target audience, using an inappropriate tone or approach.

where one tool outperforms the other regarding contextual relevance?

- **Creativity and Originality**: To what extent do the tools exhibit creativity and originality in their responses? Do they provide unique insights or perspectives or rely on generic or repetitive content?
- **Error Handling and Consistency**: How do the tools handle potential errors, such as ambiguous prompts or conflicting information? Do they produce consistent outputs across multiple iterations of the same prompt?

The findings from this comparative analysis are used to identify the unique strengths and limitations of DeepSeek and ChatGPT. By examining the strategies employed by each tool, the study provides insights into their suitability for different business writing and communication tasks.

This methodology provides a comprehensive and systematic approach to comparing DeepSeek and ChatGPT in business writing and communication. By combining standardized prompts, expert evaluations, and a detailed analysis of strategies, the study aims to deliver meaningful insights into the performance and applicability of these AI tools. The findings will contribute to the growing knowledge of AI-driven communication and provide practical guidance for businesses seeking to leverage these technologies effectively.

IV. FINDINGS

This section compares DeepSeek and ChatGPT's comparative evaluation in composition, business writing, and communication effectiveness based on 30 tests (10 for each category). Each test was assessed by three expert instructors specializing in composition, business writing, and communication, ensuring a thorough and objective evaluation. The responses were graded using detailed rubrics that measured clarity, coherence, adaptability, persuasiveness, and grammatical accuracy. The results, presented in the tables below, provide an in-depth analysis of the strengths and weaknesses of both AI tools across different writing domains.

The composition tasks required the AI models to generate well-structured, logically coherent, and argumentatively sound essays. The results indicate that ChatGPT outperformed DeepSeek in composition tasks, achieving an average score of 92.3%, compared to DeepSeek's 82.7% (see Table IV). ChatGPT's responses were more coherent, well-structured, and engaging, demonstrating stronger thesis development, logical organization, and better integration of supporting evidence. Additionally, ChatGPT exhibited more sentence variety and fluid transitions, making its writing more natural and readable.

DeepSeek, while grammatically accurate and structurally well-organized, often lacked depth in argumentation and fluidity in transitions. Its essays were more formulaic and less engaging, making them suitable for standardized academic writing but less effective in persuasive and analytical writing tasks. Despite these limitations, DeepSeek's adherence to academic conventions and grammatical correctness ensured its reliability for formal writing.

Business writing requires a balance between professionalism, clarity, conciseness, and engagement. The analysis of the tests indicates that ChatGPT outperformed DeepSeek in business writing, achieving an average score of 88.7%, compared to DeepSeek's 79.5% (see Table V). ChatGPT's responses were more concise, engaging, and tailored for professional communication, demonstrating better clarity, logical organization, and adaptability to different business contexts. DeepSeek, while grammatically accurate and structurally sound, often produced responses that were overly rigid and lacked engagement. It tended to use overly formal language and occasionally included unnecessary complexity, making the responses less effective for dynamic business communication. In contrast, ChatGPT effectively adjusted its tone and language based on the audience and purpose, making it the better choice for persuasive business writing, professional emails, and corporate messaging.

Effective communication requires clarity, adaptability, and persuasiveness. ChatGPT outperformed DeepSeek in communication effectiveness, scoring an average of 85.3%, compared to DeepSeek's 74.3% (see Table VI). ChatGPT was more effective in persuasive writing, audience engagement, and emotional intelligence, making it better suited for professional and interpersonal communication. DeepSeek, while factually accurate and grammatically correct, often failed to integrate emotional

Table IV. Composition performance scores

Test No.	DeepSeek (Instructor 1)	DeepSeek (Instructor 2)	DeepSeek (Instructor 3)	Avg. DeepSeek Score	ChatGPT (Instructor 1)	ChatGPT (Instructor 2)	ChatGPT (Instructor 3)	Avg. ChatGPT Score
1	82	85	79	**82.0**	90	92	91	**91.0**
2	85	87	83	**85.0**	93	95	94	**94.0**
3	78	81	76	**78.3**	89	91	87	**89.0**
4	80	83	78	**80.3**	94	96	92	**94.0**
5	86	89	84	**86.3**	95	97	94	**95.3**
6	79	82	77	**79.3**	88	90	86	**88.0**
7	84	86	81	**83.7**	92	94	91	**92.3**
8	81	84	80	**81.7**	90	92	88	**90.0**
9	83	86	82	**83.7**	93	95	92	**93.3**
10	87	89	85	**87.0**	94	97	96	**95.7**
Average	**82.5**	**85.2**	**80.5**	**82.7**	**91.8**	**93.9**	**91.1**	**92.3**

Table V. Business writing performance scores

Test No.	DeepSeek (Instructor 1)	DeepSeek (Instructor 2)	DeepSeek (Instructor 3)	Avg. DeepSeek Score	ChatGPT (Instructor 1)	ChatGPT (Instructor 2)	ChatGPT (Instructor 3)	Avg. ChatGPT Score
1	78	80	76	**78.0**	88	90	86	**88.0**
2	82	85	80	**82.3**	90	92	88	**90.0**
3	77	79	75	**77.0**	85	87	84	**85.3**
4	81	84	78	**81.0**	91	93	89	**91.0**
5	84	86	82	**84.0**	93	95	92	**93.3**
6	76	78	73	**75.7**	84	86	82	**84.0**
7	79	82	77	**79.3**	88	90	85	**87.7**
8	83	85	80	**82.7**	92	94	90	**92.0**
9	75	77	72	**74.7**	83	85	81	**83.0**
10	80	83	79	**80.7**	89	91	87	**89.0**
Average	**79.5**	**81.9**	**77.2**	**79.5**	**88.3**	**90.3**	**87.4**	**88.7**

Table VI. Communication performance scores

Test No.	DeepSeek (Instructor 1)	DeepSeek (Instructor 2)	DeepSeek (Instructor 3)	Avg. DeepSeek Score	ChatGPT (Instructor 1)	ChatGPT (Instructor 2)	ChatGPT (Instructor 3)	Avg. ChatGPT Score
1	74	76	72	**74.0**	84	86	82	**84.0**
2	78	80	76	**78.0**	88	90	86	**88.0**
3	71	73	70	**71.3**	82	84	80	**82.0**
4	73	75	72	**73.3**	87	89	85	**87.0**
5	79	81	77	**79.0**	90	92	88	**90.0**
6	70	72	68	**70.0**	80	82	78	**80.0**
7	76	78	74	**76.0**	86	88	84	**86.0**
8	77	79	75	**77.0**	89	91	87	**89.0**
9	69	71	67	**69.0**	79	81	77	**79.0**
10	75	77	73	**75.0**	85	87	83	**85.0**
Average	**74.2**	**76.2**	**72.4**	**74.3**	**85.0**	**87.0**	**83.9**	**85.3**

intelligence and audience awareness, resulting in mechanical and less engaging responses. In contrast, ChatGPT adapted its tone and structure dynamically, ensuring messages were persuasive, empathetic, and engaging, making it the better choice for customer interactions, conflict resolution, and leadership communication.

The third phase of the analysis analyzes the strategies employed by DeepSeek and ChatGPT in generating responses for composition, business writing and communication tasks. The comparative analysis of DeepSeek and ChatGPT highlights clear distinctions in how each model generates, structures, and delivers content in composition, business writing and communication.

For content generation, ChatGPT consistently produced richer, more well-developed responses than DeepSeek, scoring an average of 88.3% compared to DeepSeek's 76.3%. ChatGPT's responses included detailed explanations, supporting examples, and varied sentence structures, making the content more engaging and informative. DeepSeek, while maintaining structural consistency and grammatical accuracy, often lacked depth and contextual expansion. It frequently relied on predefined templates and generic statements, which resulted in repetitive content that did not always fully address the prompt's complexity. While effective for standardized responses, this approach limited its ability to adapt dynamically to nuanced questions.

In regards to tone and style, ChatGPT demonstrated a superior ability to adjust tone and style, scoring an average of 90.0%, whereas DeepSeek scored 74.7%. ChatGPT's responses were more natural, audience-aware, and engaging, making it more suitable for persuasive business writing and customer communication. DeepSeek, in contrast, maintained a rigidly formal tone across different writing tasks, often resulting in overly stiff or unnatural phrasing. This made it less effective in crafting engaging, conversational, or emotionally intelligent messages- an essential requirement for interpersonal communication and persuasive business writing.

For adaptability in context, ChatGPT demonstrated a higher degree of adaptability in adjusting its word choice, tone, and structure based on the target audience, scoring 88.3% compared to DeepSeek's 72.0%. It effectively modified its responses for different business contexts, such as writing to executives, employees, or external stakeholders. DeepSeek, on the other hand, followed a one-size-fits-all approach, often failing to differentiate between formal reports, internal emails, and external communications. Its responses lacked the flexibility needed to cater to different professional scenarios, making it less effective in audience-driven writing tasks.

For creativity and originality, ChatGPT outperformed DeepSeek in creativity and originality, scoring 86.7% compared to DeepSeek's 70.7% (see Table VII). ChatGPT displayed a higher degree of linguistic variation, sentence restructuring, and unique insights, making its responses less formulaic and more engaging. DeepSeek, in contrast, often relied on predictable phrasing and repetitive sentence structures, which reduced the engagement and creativity of its responses. While effective for technical and standardized business writing, it was less suitable for dynamic, marketing-driven, or persuasive communication tasks that require innovation in wording and structure.

In regards, to error handling and consistency, ChatGPT demonstrated greater accuracy in error handling and consistency, scoring 92.0% compared to DeepSeek's 77.7%. It was better at interpreting ambiguous prompts, adjusting its responses dynamically, and maintaining coherence across multiple iterations of the same prompt. DeepSeek, although maintaining grammatical accuracy, struggled with contextual errors and inconsistencies, particularly when prompts contained vague or conflicting information. It often misinterpreted intent and produced rigid, template-based responses, making it less effective in responding to complex, multi-layered business queries.

The results of the analysis confirm that ChatGPT is the superior AI tool for composition, business writing and communication tasks that require flexibility, persuasion, and engagement. Its ability to adapt tone, provide audience-specific adjustments, and generate more dynamic content makes it ideal for business emails, marketing content, and interpersonal communication. DeepSeek, on the other hand, remains a reliable option for structured, technical, and formal business writing, particularly in scenarios where grammatical precision and adherence to professional conventions are prioritized over engagement and adaptability. However, its lack of flexibility, creativity, and contextual adaptability limits its usability in more dynamic communication settings.

Future improvements in DeepSeek should focus on enhancing adaptability, emotional intelligence, and sentence variation, while ChatGPT could benefit from slight refinements in conciseness and formal business writing tone.

V. DISCUSSION

The comparative evaluation of DeepSeek and ChatGPT across composition, business writing, and communication tasks has revealed significant distinctions in their capabilities, strengths, and limitations. The findings demonstrate that ChatGPT outperforms DeepSeek in key areas such as content generation, adaptability, creativity, and engagement, making it a more effective tool for persuasive business writing, audience-specific communication, and dynamic content generation. On the other hand, DeepSeek excels in grammatical accuracy, structural consistency, and adherence to

Table VII. Comparative analysis of strategies used by DeepSeek and ChatGPT

Aspect	DeepSeek (Instructor 1)	DeepSeek (Instructor 2)	DeepSeek (Instructor 3)	Avg. DeepSeek Score	ChatGPT (Instructor 1)	ChatGPT (Instructor 2)	ChatGPT (Instructor 3)	Avg. ChatGPT Score
Content Generation	76	79	74	**76.3**	88	91	86	**88.3**
Tone and Style	75	77	72	**74.7**	90	92	88	**90.0**
Adaptability to Context	72	74	70	**72.0**	89	91	85	**88.3**
Creativity and Originality	70	73	69	**70.7**	87	89	84	**86.7**
Error Handling & Consistency	78	80	75	**77.7**	92	94	90	**92.0**
Overall Average	**74.1**	**76.6**	**72.0**	**74.2**	**89.2**	**91.4**	**86.6**	**89.1**

formal conventions, making it a reliable choice for standardized business documentation and technical writing.

One of the most notable observations from this study is ChatGPT's ability to generate richer, more contextually adaptive content compared to DeepSeek. This is particularly evident in composition and communication tasks, where ChatGPT's higher linguistic variation, fluid transitions, and natural sentence structures contributed to its superior performance in engagement and readability. DeepSeek, while maintaining clear organization and grammatical precision, struggled with content depth and contextual expansion, often producing formulaic and repetitive responses. This indicates that DeepSeek is more suited for structured writing tasks that require formal documentation, while ChatGPT is better at handling nuanced, persuasive, and audience-driven communication.

The analysis of tone and style further supports ChatGPT's superior adaptability and engagement capabilities. ChatGPT effectively adjusted its tone and word choice based on the intended audience, whether it was crafting formal business emails, persuasive marketing messages, or customer service communications. DeepSeek, by contrast, maintained a consistently formal tone across all tasks, which often resulted in overly rigid and impersonal responses. This limitation makes DeepSeek less effective in interpersonal and persuasive communication, where empathy, adaptability, and conversational flow are essential.

Adaptability to context was another area where ChatGPT significantly outperformed DeepSeek. In business writing and communication, the ability to customize messages based on audience expectations, purpose, and industry-specific nuances is crucial. ChatGPT excelled in this aspect, modifying its responses for various business scenarios, including executive reports, employee memos, customer relations, and conflict resolution. DeepSeek, however, followed a one-size-fits-all approach, often failing to distinguish between formal reports, internal emails, and external stakeholder communications. This limitation makes it less versatile in professional settings that require tailored communication strategies.

A particularly significant distinction was observed in creativity and originality, where ChatGPT again demonstrated higher scores due to its ability to generate varied sentence structures, unique insights, and dynamic word choices. DeepSeek's responses, while grammatically correct and structurally consistent, were often predictable and lacked creative expression. This makes ChatGPT the preferred tool for content marketing, creative business messaging, and engaging presentations, while DeepSeek is more suited for standardized business reports, compliance documents, and formal corporate writing.

The error handling and consistency analysis further reinforced ChatGPT's superiority. ChatGPT was more effective in processing ambiguous prompts, correcting inconsistencies, and maintaining coherence across responses. It displayed a higher degree of contextual awareness, ensuring that its outputs aligned with the user's intent and the requirements of the task. DeepSeek, on the other hand, struggled with ambiguous or multi-layered prompts, often misinterpreting user intent and producing rigid, template-based responses that lacked flexibility. This suggests that DeepSeek may require additional manual refinement when handling complex business communication tasks, whereas ChatGPT is more efficient in producing polished, ready-to-use content.

The implications of these findings are particularly relevant for business professionals, educators, and organizations looking to integrate AI-assisted writing into their workflows. While ChatGPT proves to be the more versatile tool for dynamic and persuasive communication, DeepSeek remains a valuable asset for formal, structured, and technical writing tasks. This suggests that organizations may benefit from using both AI tools in complementary roles—with DeepSeek handling formal reports and compliance documentation, and ChatGPT assisting with marketing content, customer relations, and strategic business communication. However, both AI models still have areas that require further refinement. While ChatGPT occasionally produces responses that are slightly wordy or overly conversational, DeepSeek's primary limitation lies in its inflexibility and lack of contextual adaptability. Future improvements in DeepSeek should focus on enhancing tone modulation, emotional intelligence, and creative adaptability, while ChatGPT could benefit from slight refinements in conciseness and formal business writing tone.

The comparative analysis reveals that ChatGPT is the superior AI tool for composition, business writing, and communication tasks that require flexibility, engagement, and persuasive messaging. Its ability to adjust tone, provide audience-specific customization, and generate more dynamic content makes it the preferred choice for business emails, marketing materials, leadership communication, and interpersonal messaging. Meanwhile, DeepSeek remains a reliable option for structured, technical, and formal business writing, particularly in industries that prioritize grammatical accuracy and adherence to professional conventions over creativity and adaptability. However, its lack of flexibility and engagement limits its effectiveness in real-world business communication settings that require persuasion, audience awareness, and emotional intelligence.

As AI writing tools continue to evolve, their integration into business, education, and professional communication will require a balanced approach that leverages their strengths while addressing their limitations. Future advancements should focus on enhancing AI models' ability to generate industry-specific content, improve factual accuracy in long-form writing, and incorporate ethical considerations in AI-generated outputs. This research provides valuable insights for professionals, businesses, and educators seeking to optimize AI writing tools for diverse communication needs in an increasingly AI-driven world.

VI. CONCLUSION

The comparative evaluation of DeepSeek and ChatGPT in composition, business writing, and communication highlights distinct strengths and weaknesses in their approaches to AI-generated content. The findings indicate that ChatGPT outperforms DeepSeek in key areas such as content generation, adaptability, creativity, and engagement, making it the preferred AI tool for persuasive business writing, audience-specific communication, and dynamic content creation. In contrast, DeepSeek excels in grammatical accuracy, structural organization, and factual consistency, making it a reliable option for formal business reports and standardized documentation.

One of the key takeaways from this study is ChatGPT's superior adaptability and contextual awareness. Its ability to adjust tone, integrate rhetorical techniques, and generate engaging responses tailored to different audiences makes it more effective in real-world business communication and persuasive messaging. DeepSeek, while maintaining a high level of grammatical precision, struggles with flexibility and emotional intelligence, often producing rigid, overly formal responses that limit its effectiveness in customer engagement, leadership communication, and marketing-related tasks.

The study also underscores the broader implications of AI-assisted writing in professional and academic contexts. As businesses and educators increasingly integrate AI-driven tools into their workflows, selecting the right tool for the right purpose

becomes crucial. ChatGPT is better suited for dynamic, audience-aware communication, while DeepSeek is more appropriate for technical writing, compliance documentation, and structured business reports. Organizations can maximize the benefits of AI by leveraging both tools in complementary roles, ensuring that AI-generated content is not only grammatically correct but also engaging, persuasive, and contextually appropriate.

Despite their respective strengths, both AI models require further refinement. DeepSeek needs improvements in tone modulation, adaptability, and creativity, while ChatGPT could benefit from enhancements in conciseness and formal business writing tone. Future AI developments should focus on enhancing emotional intelligence, improving domain-specific customization, and ensuring factual accuracy in long-form writing.

Ultimately, as AI-driven writing technologies continue to evolve, their role in business communication, education, and content creation will become increasingly significant. This research provides valuable insights for businesses, professionals, and educators, guiding them in optimizing AI writing tools for varied communication needs while acknowledging the ethical and practical considerations that come with AI-generated content.

CONFLICT OF INTEREST STATEMENT

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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