DESIDOC Journal of Library & Information Technology, Vol. 44, No. 3, May 2024, pp.151-157, DOI : 10.14429/djlit.44.03.19698

Generative AI Tools for Collaborative Content Creation: A Comparative Analysis

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ABSTRACT

ICT applications streamlined processes across multiple industries and improved efficiency at a lower cost. Although everyone is generally in favor of this, many people view the development of artificial intelligence as both a blessing and a threat. It is unquestionably widely utilized in academic settings for experimentation and concept articulation, but with so many possibilities available, students and researchers find it difficult to select the best one. This study attempts to evaluate seven generative AI content creation tools—Writesonic, Jasper, Grammarly Business, ProWritingAid, Scalenut, Rytr, and TextCortex AI-using data from the GetApp website. Employing content analysis, the seven selected tools were compared on the basis of qualitative data converted to binary format. Grammarly Business led with a score of (76), followed by Scalenut (75), Writesonic (53), ProWritingAid (51), Jasper (48), TextCortex AI (38), and Rytr (36). This study highlights the pivotal role of collaboration in generative AI, showcasing diverse features, from grammar checks to creative content generation. The significance of this study lies in aiding academia and professionals in strategic tool selection, emphasising the need for informed decision-making in collaborative efforts. Integrating Artificial Intelligence and Natural Language Processing enhances scholarly endeavours, underlining the necessity for efficient content creation during digital evolution.

Keywords: Artificial intelligence (AI); Generative AI; Content creation; Collaboration tools; Academic community; GetApp

1. INTRODUCTION

The academic realm has seen a burgeoning growth in artificial intelligence (AI). This expansion has led to the development of sophisticated tools designed to offer prompts and support essential for conducting research with content creation endeavours. According to the insights shared by John McCarthy, a renowned academic figure, "Artificial intelligence (AI) is the science and engineering of making intelligent machines and brilliant computer programs"[1]. This pertains to a comparable initiative that employs computers to understand human acumen within the context of scholarly discussions[2]. AI has significantly advanced across diverse domains, including "gaming, natural language processing (NLP), expert systems, vision systems, speech recognition, handwriting recognition, and intelligent robotics"[3]. AI's expansive scope, which encompasses many applications and technologies, shows its profound impact on many academic fields. Pursuing engaging content remains an ongoing endeavour within the dynamic realm of academia. Academic libraries must enhance services and resources to stay relevant. Information literacy programmes vital for academic growth depend on library offerings. Continuous upgrades are essential to meet evolving user needs and support student and scholarly development[4]. A recent study found that 73 % of marketing professionals in the United States incorporated generative AI tools, such as chatbots, into their professional practices[5]. Through these AI tools, academics and researchers can craft compelling narratives, tailor messages to specific audience segments, and enrich interactions and dialogues[6]. This study investigates the potential of generative AI for content creation. It also conducts a comparative analysis of the specific tools employed in the creative process.

Received : 05 December 2023, Revised : 14 January 2024
Accepted : 05 February 2024, Online published : 07 May 2024

2. LITERATURE REVIEW

Between November 2022 and June 2023, notable advancements were made in Generative AI tools, captivating the attention of the people and academic fraternities. This period introduced ground breaking tools like "Microsoft's Bing Chat, Google's Bard, Meta's LLaMA, and Elon Musk's X.AI". This technology empowers academic researchers by supplying tools to enhance content creation, stimulate creativity, and offer personalised experiences. It revolutionises how individuals engage with specific audience demographics, shaping innovative strategies for creative campaigns and delivering significant outcomes while addressing challenges in content creation, such as time constraints and limited resources[7]. AI is rapidly developing, substantially affecting learning, development, and knowledge creation in educational settings and training providers.

AI can significantly enhance academic communication through its capabilities in paraphrasing, summarising,

and various conversational techniques. A substantial body of scholarly work examines the capabilities and prospects of generative AI tools[8]. These Generative AI tools are poised to exert a considerable beneficial influence on public health because they can provide cost-effective, constructive health guidance[9]. In the contemporary business environment, neural networks have become indispensable, playing a crucial role in gaining a competitive edge. Their diverse applications extend across the civil and military sectors, serving various commercial purposes[10].

However, scholars flagged issues concerning the impact of generative AI on medical writing, acknowledging its potential. They also raised serious red flags, emphasising the serious risks of spreading erroneous and misleading information. The risks associated with generative AI-generated content are not dissimilar to human errors; however, what distinguishes these risks is the systematic nature of errors in AI products. Unlike humans, who might admit not knowing the answer, some AI tools tend to generate false claims in such situations. This phenomenon raises significant concerns within the academic community, especially considering that human judgement and internet searches might yield different results, highlighting the unique challenges posed by AI-generated content. Queries have been raised concerning the potential consequences for individuals engaged in learning and development, prompting consideration within academic circles[11], and the necessity for educators, coaches, and institutions of learning to scrutinise their policies and practises is imperative within an academic context. Scholars have seen a notable divergence of opinions among researchers regarding the use of these tools. This disparity underscores the necessity for a comprehensive comprehension of the capabilities of these tools and effective strategies to oversee their usage. This is vital for upholding the authenticity of educational practises and assessments[12].

3. PREPOSITIONS

This study evaluates the application of generative AI technology within academic contexts and provides a comprehensive analysis of the tools used in this domain. The assessment data originates from the GetApp website [https://www.getapp.com/], which forms the basis for this evaluation. Specifically, this study focuses on the outlined objectives for an in-depth analysis within an academic context.

- To identify the most effective collaboration tools for generating AI-driven content in the field of academia;
- To compare generative AI tools by examining the shared characteristics that underlie their functionality; and
- To find the most effective tool through a comprehensive comparative analysis through scores.

4. METHODOLOGY

In this research, a comparative method was used to explore the similarities and distinctions among seven collaborative tools for generative AI content creation. These tools were sourced from the GetApp website [https://www.getapp.com/], indicating a systematic approach to evaluating their features and functionalities within the academic context.

GetApp categorises online software by industry, business need, operating system, pricing, and deployment. With over one million verified reviews, it is a trustworthy business App Store that aids informed decisions[13]. This research underscores a thorough evaluation of e-learning tools by employing a methodical feature-based comparison of various platforms. Assessments of these platforms were extracted from getapp.com, a widely recognised and credible software review platform. The ratings and suggestions from getapp.com served as a key metric for assessing e-learning platforms in this scholarly investigation[14-15].

In this research endeavour, an extensive exploration of generative AI content-creation collaboration tools was conducted systematically. Initially, a search employing the keyword 'Artificial Intelligence' yielded 557 available software options. Subsequently, the selection was refined by applying a filter for 'Collaboration Tools', resulting in 155 viable options. Recognising the necessity for studying AI content creation tools within an academic context, the tool 'Writesonic' was chosen as the focal point for the comparative analysis. To ensure comparability, alternative software options possessing collaborative features similar to those of Writesonic were sought. Consequently, Jasper, Scalenut, Rytr, Grammarly Business, and TextCortex AI were identified. While exploring generative AI collaboration content creation tools, an additional tool, 'ProWritingAid', was discovered, meeting

Table 1. Generative AI collaboration content creation tools (M= Million)

Tools	Origin year	Customer base	URL	Language support
Writesonic	2020	5M+ professionals	https://writesonic.com/	24+
Jasper	2021	0.1M+companies	https://www.jasper.ai/	30+
Grammarly Business	2009	0.07M teams	https://grammarly.com/business	1
ProWritingAid	2012	2M users	https://prowritingaid.com/	1
Scalenut	2021	0.1M+ marketers	https://www.scalenut.com	1
Rytr	2021	7M+ professionals	https://rytr.me/	35+
TextCortexAI	2021	0.1M+ marketers	https://textcortex.com/	25+

all the prerequisites for the study. Therefore, it was included in the comparative analysis, broadening the scope of the investigation. Comprehensive research has been conducted to evaluate various products by examining their respective websites[16-22]. The meticulously analysed data, conveniently summarised in Table 1, reveals interesting findings on the assessment tools. Grammarly Business is the oldest among them, followed by ProWritingAid. In addition, Rytr has the largest customer base and language support, indicating its importance in these areas.

5. ANALYSIS

Content analysis, as a primary methodological tool, was employed to extract essential findings from the qualitative data. This involved a detailed examination of the textual and descriptive information available on the GetApp website to identify and categorise relevant details regarding the aforementioned dimensions. Through content analysis, the research aimed to unearth and organise critical insights on customer profiles, pricing structures, compatibility with different platforms, customer support quality, training resources, and key features across the selected generative AI content creation collaboration tools.

Following the content analysis, the data were further processed by transforming them into binary format, represented as 0 and 1s. This modification eased the systematic and methodical approach to data analysis, enabling quantitative assessment of various dataset features. The use of binary representation enhanced objectivity and enabled a comparative evaluation of qualitative data. In the academic study, the researchers used Excel spreadsheets for data analysis after transforming the dataset. Within this analytical framework, an in-depth exploration of the data was undertaken to identify inherent patterns and trends among the 7 collaboration tools employed for generative AI content creation.

5.1 Typical Customers

The analysis phase began with a comprehensive exploration of typical customer profiles associated with the seven generative AI content creation collaboration tools. Table 2 illustrates that ProWritingAid and TextCortex AI lack support for freelance professionals, and Scalenut does not cater to the needs of large enterprises.

5.2 Pricing Strategies

An exhaustive examination of pricing options was undertaken to comprehensively grasp the diverse pricing models provided by each tool. Table 3 presents a comprehensive overview, showing that ProWritingAid offers the complete spectrum of pricing choices, followed by Writesonic, Grammarly Business, and Scalenut.

5.3 Platform Supported

Simultaneously, the analysis focussed on the examination of platform support. This involved scrutinising the compatibility of each tool with different platforms, operating systems and devices. Table 4 demonstrates that Grammarly Business offers support across all three platforms, with others limited to web-based support.

5.4 Customer Support

Customer support mechanisms were scrutinised to assess the responsiveness, accessibility and effectiveness of the support provided by the tool developers. Table 5 shows that Scalenut stands out as the sole provider offering comprehensive customer support services, followed by Writesonic, Jasper, Grammarly Business, ProWritingAid, and TextCortex AI, in descending order of the extent of customer support they offer.

5.5 Training Options

Training options were explored to identify the availability of tutorials, guides, webinars, and other educational resources. The comprehensiveness and accessibility of the training materials were analysed to gauge the ease with which users could on board and effectively use the tools' capabilities. Table 6 elucidates that Writesonic and Scalenut are the sole platforms offering comprehensive training resources, with Jasper, ProWritingAid, and TextCortex AI following suit in providing various training capabilities.

5.6 Key Features

Identifying these key features involved a meticulous comparison of the functionalities of all seven tools. This comparative analysis pinpointed the essential capabilities universally integrated across the tools. These common features listed in Table 7, served as a baseline for understanding the fundamental offerings that users could expect regardless of their choice of tool. Content creation AI tools were assessed based on categorised features, resulting in the following scores: Writesonic (36), Jasper (33), Grammarly Business (60), ProWritingAid (35), Scalenut (57), Rytr (25), and TextCortex AI (24).

6. RESULTS

Following a comprehensive analysis of various attributes related to collaboration tools for Generative AI content creation, Grammarly Business emerged as the frontrunner with a score of 76. This comparative assessment ranks Grammarly Business in the top position closely followed by Scalenut (75), Writesonic (53), ProWritingAid (51), Jasper (48), TextCortex AI (38) and Rytr (36), as detailed in Table 8.

7. CONCLUSIONS

This exploration illuminated the nuanced strengths and weaknesses of these tools, providing valuable insights into their applicability and efficiency. Our findings highlight Grammarly Business as the frontrunner, making it a comprehensive solution for collaborative content creation. One of the notable observations from our analysis is the diverse landscape of features among

Table 2. Products by customer base

Typical customers	Writesonic	Jasper	Grammarly business	Prowriting aid	Scalenut	Rytr	TextCortex AI
Freelancers	√	√	√	×	√	√	×
Small businesses	√	√	√	√	√	√	√
Mid-size businesses	√	√	√	√	√	√	√
Large enterprises	√	√	√	√	×	√	√
Total score	4	4	4	3	3	4	3

Table 3. Products by pricing strategies

Pricing options	Writesonic	Jasper	Grammarly business	ProWriting Aid	Scalenut	Rytr	TextCortex AI
Free plan	×	×	√	√	√	√	√
Subscription	√	√	√	√	√	√	√
Free trial	√	√	√	√	√	×	×
Credit cardless trial	√	×	×	√	√	×	×
Total score	3	2	3	4	3	2	2

Table 4. Products by platforms supported

Platform Supported	Writesonic	Jasper	Grammarly business	ProWriting Aid	Scalenut	Rytr	TextCortex AI
Web	√	√	√	√	√	√	√
Android	×	×	√	×	×	×	×
iPhone/iPad	×	×	√	×	×	×	×
Total score	1	1	3	1	1	1	1

Table 5. Products by customer support

Customer support	Writesonic	Jasper	Grammarly business	ProWriting Aid	Scalenut	Rytr	TextCortex AI
Knowledge base	√	√	√	√	√	√	√
Chat	√	√	√	√	√	√	√
Email/help desk	√	√	√	√	√	×	√
Phone support	×	×	×	×	√	×	×
FAQs/forum	√	√	√	√	√	√	√
24/7 (Live rep)	×	×	×	×	√	×	×
Total score	4	4	4	4	6	3	4

Table 6. Products by training solutions

Training options	Writesonic	Jasper	Grammarly business	ProWriting aid	Scalenut	Rytr	TextCortex AI
Videos	√	√	×	√	√	×	√
Webinars	√	√	×	√	√	×	√
In person	√	×	×	×	√	×	×
Documentation	√	√	√	√	√	√	√
Live online	√	√	√	√	√	×	√
Total score	5	4	2	4	5	1	4

Table 7. Key features of AI content creation collaboration tools

Academic/education:
Assisted content creation
Content generation
Content scan
Content sharing
Customisable templates
Document management
Revision history
Rich text editor
Spell check

Access control/ permissions:
Secure login
Single sign-on

Alerts/notification:
Alerts/notification
Real-time notifications

API and integration:
API
Third-party integration

Activity and perfomance monitoring:
Activity dashboard
Activity tracking
Performance metrics
Real-time analytics
Real-time comparisons
Real-time monitoring
Real-time notifications
Real-time reporting
Real-time updates

AI/machine learning:
AI/machine learning
Automated text generation
Natural language processing
Natural language search
Sentiment analysis
Variation auto encoder models

Content management and publishing:
Content delivery
Content ideas
Content library
Content management
Content publishing options
Content sharing
Customisable branding
Customisable categories
Customisable reports
Customisable rules
Customisable templates
Data import/export
Document export
Document review
Duplicate detection
Localisation automation
Multiple data sources
Multiple file format support
Multiple user accounts
Publishing scheduling
Search
SEO management
Tagging
Template management
Templates
Text editing
Text review
Version control

Email and communication:
Email management
Email marketing
Messaging
Real-time updates
Snippets

File management and sharing:
File management
File sharing
Multiple file format support
Video support

Marketing and advertising:
Competitive analysis
Interactive and co-creative systems
Keyword rank tracking
Keywords research tools
Multi-channel campaigns
Search marketing
Social advertising
Social marketing
Social media integration
Social promotion

Search and analysis:
Full-text search
Search/filter
Trend analysis

Security and compliance:
SSL security

Text analysis and editing:
Auto-save
Auto complete
Auto correct
Grammar check
Punctuation check
Style check
Text similarity detection
Tone selection

Office and productivity:
Office suite
Performance management
Productivity tools
Project Management
Workflow management

User management:
User management

Other:
Black link monitoring
Bulk uploading
Contextual guidance
Corporate/business
For e-commerce
For sales teams/organisations
For marketing & advertising
Language detection
Long-form content
Machine learning
Mobile access
Mobile alerts
Multi-language
Multi-location
Performance metrics
Plagiarism detection
Post scheduling
Problem area alerts
Reporting & statistics
Source database
Speech recognition
Summary reports

Table 8. Final scores of generative AI content creation collaboration tools

Variable	Writesonic	Jasper	Grammarly Business	ProWriting Aid	Scalenut	Rytr	TextCortex AI
Typical customers	4	4	4	3	3	4	3
Pricing options	3	2	3	4	3	2	2
Platform supported	1	1	3	1	1	1	1
Customer support	4	4	4	4	6	3	4
Training options	5	4	2	4	5	1	4
Key features of AI tools	36	33	60	35	57	25	24
Total Score	53	48	76	51	75	36	38

these tools, catering to several aspects of collaborative content creation. While some tools excel in grammar and syntax checks, others stand out in creative content generation. This diversity underscores the importance of aligning tool choice with specific project requirements and team goals. Furthermore, present research emphasises the critical role of collaboration in the field of Generative AI. The tools assessed in this research not only ease content creation but also foster collaborative efforts, enabling seamless teamwork in the digital age. As the demand for high-quality AI-generated content continues to increase, understanding the capabilities of these tools becomes paramount for professionals and academics alike. In conclusion, our comparative analysis is a focal point for individuals and organisations navigating the intricate landscape of Generative AI content creation collaboration tools. By recognising the distinct features and functionalities offered by each platform, stakeholders can make informed decisions, enhancing the efficiency and creativity of collaborative content creation processes. As the field of Generative AI evolves, ongoing research and exploration will be essential to uncover emerging tools and trends. By staying abreast of these developments, professionals and researchers can harness the full potential of Generative AI, driving innovation and excellence in collaborative content creation.

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