Keyword Search Tools: A Detailed Comparative Analysis of Features and Efficiency

Muhammad Huzaifa
Email.com
Zubair Ahmad
Email.com

Ilsa Sheraz
Email.com
Sabeel Fida Abbasi
Email.com

Ahmad Soban
Email.com
Muhammad Umer
Email.com

Academic Advisor: Muhammad Arif Shah
School of Computer Science
Pak Austria Fachhoschule Institute of applied Sciences and Technology
Haripur, Pakistan
Email.com

Abstract -- This study conducts a comprehensive comparative analysis of seven widely used tools for trend analysis and keyword research: Google Trends, GLIMPSE, SEMrush, Ahrefs, Ubersuggest, Pinterest Trends, and Keyword Tool. The evaluation considers multiple factors, including trend graph visualization, access to absolute search volume data, real-time and historical insights, AI-driven analysis, and automated report generation. Both free and paid tools are examined to assess their strengths, limitations, and overall suitability for different user segments, such as casual marketers, content creators, and professional SEO specialists. The findings highlight critical aspects of usability, data accuracy, pricing models, and feature robustness, offering insights into how effectively these tools meet the evolving demands of digital marketing. Additionally, the study explores emerging trends, including AI-powered predictive analytics, and their implications for future SEO strategies. By providing a structured comparison, this research serves as a valuable resource for marketers and analysts, assisting them in selecting the most appropriate tool for their specific needs while offering a broader perspective on the future trajectory of trend analysis and keyword research in the digital landscape.

Keywords -- Keyword Research Tools, SEO Optimization, Digital Marketing Strategies, Search Engine Optimization (SEO), Content Marketing Tools, Trend Analysis Software

I. INTRODUCTION

Today, the use of internet is the need of the hour and as businesses heavily depend on the online platforms to engage with consumers, digital marketing has acquired great importance in this time. At this point (81% of consumers do research online before purchase (Google 2023)), it's important to understand how your target audience behaves and what he wants, to make your marketing successful. This process is only possible thanks to the ability to detect and trace consumer interests and search patterns, which can deliver enormous marketer information. Marketers can base their campaign optimization and content creation on the understanding of these trends (Chaffey, 2020).

The growth of search trends and keyword analysis has changed innovation of how businesses market themselves. search behavior analysis helps marketers to find out emerging trends, seasonal shifts, and forecast consumer demand. Knowing this, businesses can stay more ahead of competitors by offering products and services fitting many needs in the market (Jansen, 2021). Search engine optimization (SEO), keywords are like a vital role in process, to help businesses to increase visibility and to make search engines their search content detectable (Li & Huang, 2020). To mitigate the effects of evolving search trends, businesses must use both current and historic trends to remedy the behaviors of the customers.

However, business confronts options of trend analysis and keyword research tools and the most suitable platform among all these tools. There are these, differing in features, capabilities, pricing models; which must be assessed carefully to assess which will most suit particular needs. Advanced findings and functionalities are provided by some tools, while others focus on simpleness and ease of use. The dilemma is to strike a perfect balance among affordability, functionality and data accuracy to succeed in marketing campaigns (Chen et al., 2021).

The purpose of this paper is to make a comparison against seven popular trend analysis tools which are Google Trends, GLIMPSE, SEMrush, Ahrefs, Ubersuggest, Pinterest Trends, and Keyword Tool. Each tool is to be analyzed based on factors like trend graph visualization, access to absolute volume data, real time data availability, historical data analysis, AI integration, and the potential of generating automated reports. This comparative evaluation allows the paper to present the insights to marketers and researchers in how to select the most suitable tools and according to which data to leverage the best data to develop digital marketing strategy and increase their decision making (Smith & Zhou, 2020).

Problem Statement -- Though several trend analysis and keyword research tools are available nowadays in the market, there is a shortage of a thorough comparative research study, which reviews these tools on basis of various key features, data accuracy, usability and feature affordability, and real time data capabilities. Given that there is no study of such kind, it leaves room for pitfalls in the business sense for businesses, mostly the ones that are limited in resources or are still in their early stages of digital marketing to choose which is the most appropriate tool to fulfill their demands. Moreover, the unending life of search trends and the way in which these tools change their pricing models make it difficult to ascertain its long term effectiveness. This research seeks to close this gap by performing a comprehensive comparative evaluation of seven prevalent trend analysis tools such as Google Trends, GLIMPSE, SEMrush, Ahrefs, Ubersuggest, Pinterest Trends, and

Keyword Tool on key areas of consideration for the use of such tools in a business or marketing context.

Research Questions -- The research project addresses three essential questions regarding website investigating tools.

- The main components alongside functions of Google Trends, GLIMPSE, SEMrush, Ahrefs, Ubersuggest, Pinterest Trends and Keyword Tool involve.
- Among the tools what features and capabilities do they have and how do they differ in the presentation of trends what information they provide about search volume data and when does their data cover and what AI-driven functions are available?
- Each tool demonstrates strength and weakness mainly through usability analysis while accuracy assessment and pricing evaluation factor into their practical application.

Research Objectives -- The essential goals of this investigation include:

- The research evaluates seven mainstream trend analysis tools by assessing their functionality with usability metrics and assessing pricing plans and accuracy of gathered data.
- These tools should be evaluated for their ability to display trends along with their real-time information display and AI prediction functions.
- Each tool assessment investigates its core advantages and weaknesses so organizations can select their optimal solution according to their requirements.

II. LITERATURE REVIEW

Many trend analysis tools have sprung up as digital marketing increasingly relies on data driven techniques. By evaluating general market trends, keyword popularity, and search behavior, these tools are meant to help marketers to make wise judgments. **SEMrush, Google Trends**, **Ahrefs,** and lately websites including the **GLIMPSE** and **Ubersuggest** have been among the most examined tools in this sector. The tools are often used to refine the market positioning, perfect the content strategies, and enhance the search engine optimization (SEO) efforts..

Among the most well known trend analysis tools, **Google Trends** gives useful information on the relative popularity of search terms over time. Choi

and Varian (2012) say **Google Trends** lets advertisers find and follow the popularity of particular search terms, therefore it is a key tool for consumer interest changes analysis. Especially beneficial for tracking regional changes in search volume and seasonal variations would be this technology (Ginsberg et al., 2009). Still, **Google Trends** is missing in several ways—most notably in its absence of straightforward search volume data and more advanced functions such strategic competitive analysis and keyword recommendations. These flaws may limit companies seeking a good competitive research tool or SEO software from using it fairly well.

Ahrefs and **SEMrush** have long been regarded as elite-level tools that preserve and analyze data beyond trend patterns. In this regard, Azzopardi et al. (2020) mention that **SEMrush** is a darling for many due to its unrivaled keyword research and competitive analysis features. To this note, **SEMrush** aids companies in identifying essential keywords, monitoring keyword positions, and determining how competitors perform in pertinent analyses. These components are vital for developing an effective SEO campaign, more so in aggressive markets where specific keywords need to be targeted to achieve desired results. **Ahrefs** is also well-known for its backlink and content gap analysis features, which let users find areas where they are lacking in content and obtain links from other highly reputable websites. **Ahrefs** does an excellent job of conducting a comprehensive analysis of a website's backlink profile, according to Dikici and Tokgöz (2021). The software is required if companies want to improve their organic positions and domain authority.

Although **SEMrush** and **Ahrefs** tend to provide deeper services, they can be pricier than free apps like Google Trends. Still, as Chaffey (2019) states that 'an organization wanting to enhance their SEO effectiveness, in practical terms, will find that the advantages of tracking keywords, analyzing backlinks, and obtaining competitive intelligence will outweigh the monetary costs." They are key in allowing a company to frame relevant and timely content for its target markets and keep its content plan in line with shifts in expression and detail in the market. **SEMrush** and **Ahrefs** are a necessity, allowing an organization to jump on a trend before others saturate it but also providing a way to

discover new markets or topics (Marr, 2020).

The use of trend analysis in content marketing strategies is well established in the literature. Kannan and Li (2017) state that trend analysis tools are integral to identify high-yield topics and content opportunities. Trend analysis tools assist organizations in understanding consumer behavior and in aligning their content production strategies with search terms that are beginning to gain traction in the marketplace. This is especially useful for businesses and organizations in consumer-based industries, where consumer interests change rapidly, such as in the fashion, technology, and health and wellness industries. While there is much research conducted on existing SEO tools in the literature, there is a gap in research literature that looks at comparative analyses of more recent tools such as **GLIMPSE** and **Ubersuggest**. Most studies have looked at individual tools. There is little literature comparing different tools against multiple criteria, such as real-time access to data, assisting with artificial intelligence, reporting capabilities, and general ease of use. Furthermore, there is very little research published on weighing the pros and cons of free tools vs. paid tools and whether a free tool produces results that can meet growing demands of precision and overall comprehensive analysis (Marr, 2020).

An important gap in the current research is the absence of research comprehensively analyzing free tools and paid tools for trend analysis. Comparing free tools with paid tools is extremely important to all businesses, but especially to a smaller company whose marketing budget is limited, to know if the investment in paid tools, such as **SEMrush** or **Ahrefs**, is worth the money or if free tools, such as **Google Trends** and **Ubersuggest**, will do the same work. Research on real time data access and AI powered capabilities is also limited in the literature relating to how they affect the efficacy of these tools in fast-paced, lively industries.

In conclusion, while there has been a mix of studies analyzing the individual abilities of well-known trend analysis tools (**Google Trends**, **SEMrush**, and **Ahrefs**), there has not yet been a comprehensive comparative research study undertaken. This study aims to close the gap by investigating factors including how data can be

acquired in real time, the use of applied artificial intelligence, and reporting abilities in a range of different trend-analysis tools. This systematic comparison will help enable companies to select the most suitable market trends analysis tool for their own online marketing needs, and hopefully be another means of refining decision-making.

III.   METHODOLOGY

This study evaluates comparative analysis of the features of seven keyword analytics tools, Google Trends, GLIMPSE, SEMrush, Ahrefs, Ubersuggest, Pinterest Trends and Keyword Tool. A set of pre defined criteria is used to evaluate the tool and are what marketers and researchers take into consideration when making the decisions on which tool is best for their needs. The tool should

meet these criteria to assess its functionality, usability and effectiveness in helping discover search trends and analysis of keywords.

A. Criteria for Evaluation

Following criteria would be adopted for a strong comparative analysis:

- **Trend Graph Visualization** -- A search trends over time is key feature of keyword analytics tools. With well designed trend graphs marketers are able to quickly see changes in interest, seasonal patterns, and moves of the overall market. Important to be able to filter and customize these graphs for getting insights out of it. The tool is evaluated in this regard, to see how well each one shows trend data and the amount of leeway that it provides with the information to refine it into deeper analysis

Tool	Features	Key Strengths	Limitations
Google Trends	Search volume trends over time, regional analysis	Free, widely used, identifies seasonal trends	No absolute volume data, limited advanced features
Ahrefs	Keyword research, SEO audit, competitor analysis	Comprehensive SEO tools, competitor insights	Higher cost, steep learning curve
GLIMPSE	Backlink analysis, keyword research, content gap	In-depth backlink profile analysis, strong content gap analysis	Higher cost, lacks content creation features
Ubersuggest	Real-time data, emerging trends, keyword tracking	AI-powered insights, trend forecasting	Newer tool, limited adoption
Pinterest Trends	Keyword suggestions, SEO audit, backlink data	Free option, easy to use, affordable	Less detailed than SEMrush and Ahrefs
Keyword Tool	Trending search terms on Pinterest	Niche audience insights, ideal for visual products	Limited to Pinterest data, not a comprehensive SEO tool
SEMrush	Keyword suggestions, SEO analysis	Easy-to-use, affordable alternative for small businesses	Limited data compared to premium tools like SEMrush and Ahrefs

Table 1: Comparison of Trend Analysis and Keyword Research Tools

- **Absolute Volume Data** -- For a trend, it is critically important to understand the absolute search volume associated with that trend to determine its significance. Accurate and detailed volume data is offered by many tools that allow marketers to determine what a topic or keyword is really popular so that they can deploy their marketing efforts accordingly. Each tool is assessed in this evaluation to see if it has access to absolute search volume data and if so, how far the information gets.

- **Real-Time Data** -- Market data at real time reveals current developments; this lets the marketer maintain agility in deciding and very important, act faster. Real time data access tools allow businesses to change strategies quickly in a fit response to sudden changes in the behavior of consumers. This is a criterion based on how up to date a tool's data is and how this affects the implementation of real time marketing strategies.

- **Historical Data** -- These long term trend data can be used to build up a historical backdrop of how consumers have changed over time. Marketing can use historical data to learn patterns, predict future patterns, take long term decisions. It means whether each tool provides access to historical data, number of years covered and how easily the data can be analysed for long periods of time.

- **AI Integration** -- Artificial Intelligence may provide strong enhancement to search trend analysis with the intuition of future trends, application of personalized recommendations, and processing of more data. The evaluation levels of the integration of AI in each tool, including the AI powered trend forecasting and machine learning which upgrades the quality of the insights.

- **PDF Report Generation** -- Artificial Automated reports can significantly improve the effectiveness by summarizing the main insights and presenting them in a professional format. This feature is especially useful for businesses and researchers to present data to customers or stakeholders. This evaluation assesses that each tool can create detailed PDF reports and can be customized, and to which extent these reports are interested in making decisions and communication.

- **Pricing** -- With different budget constraints, business have different preferable amount on how much they can spend. Some tools offer free versions with limited features while others followed the subscription model. This evaluation looks at pricing of each of these tools and how they compare paying and free options, but also how much value is given for the price ranges.

A. Data Collection Process

Data was collected from a number of sources to ensure accuracy and comprehensiveness, data was collected for the comparative analysis. All the key features, pricing plans and functionalities of each tool were described on official websites of each tool and the main data was taken from there. Also, reviews from users on such platforms as Trustpilot, G2 and Capterra were analyzed to get insights about the real world users' experience, both strengths and weaknesses. Secondly, the findings are supplemented with relevant external studies and reports on digital marketing tools from reputable sources including industry analyses and comparison of digital marketing tools from appropriate sources.

B. Data Analysis

The evaluation criteria were applied to each tool, and a score was assigned per tool. The scores are from 1 (poor) to 5 (excellent). For each criterion, the performance score was calculated with its importance accordingly weighted. Table 3 is the weights used to the criteria.

Evaluation Criteria	Weightage
Trend Graph Visualization	20%
Absolute Volume Data	20%
Real-Time Data	15%
Historical Data	15%
AI Integration	10%
PDF Report Generation	10%
Pricing	10%

Table 3: Weightage of each Evaluation Criteria

Tool	Description	Trend Graph	Absolute Volume	Real-time Data	Discover Trends	Historical Data (5+ yrs)	AI Integration	PDF Report Generation	Price
Google Trends	Analyzes the popularity of search queries over time	✓	✗	✓	✗	✓	✗	✗	Free
GLIMPSE	Enhances Google Trends with additional features	✓	✓	✓	✓	✓	✗	✗	Limited free plan; paid plans start at $49/month
SEM rush	Comprehensive SEO and keyword research tool	✗	✓	✗	✗	✗	✗	✓	Limited free plan; paid plans start at $140/month
Ahrefs	SEO and keyword research tool	✓	✓	✗	✗	✓	✗	✓	Limited free plan; paid plans start at $29/month
Ubersuggest	SEO and keyword research tool	✗	✓	✗	✗	✗	✗	✗	Starts at $29/month
Pinterest Trends	Analyzes trending topics on Pinterest	✓	✗	✗	✓	✗	✗	✗	Free
Keyword Tool	Generates long-tail keywords via autocomplete	✗	✓	✗	✗	✗	✗	✗	Limited free plan; paid plans start at $89/month

Table 2: Features and Pricing Overview of Popular Trend Analysis Tools

These features have their weightage based on how important they are in the process of evaluating a trend analysis tool. Absolute Volume Data and Trend Graph Visualization (20%) are given the highest weights because you need to visualize trends and see how big their scale is to get meaningful analysis. The other important thing is Real Time Data (15%) and Historical Data (15%) which let the user see the current trend and look after long term trands. Moderately weighted (10%) are PDF Report Generation (10%) and AI Integration (10%), as predictive insights and report generation generate value, but are not the core functionalities of the product by all users. Last but not least, Pricing (10%) is undermined as it plays a less important role than the analytical skills the tool offers. In doing this, the weighting to this evaluation balances how usable, deep analytically, and cost effective the tools are. Finally, the weighted average formula for all the tools was utilized to derive the overall score for each tool as defined by the following:

$$Overall\ Score = \sum_i Score\ of\ Criterion\ i * Weight\ of\ Criterion\ i$$ ------------ Eq.(**I**)

Criteria	Score	Weight (%)	Weighted Score
Trend Graph Visualization	4	20	$4 \times 20 = 80$
Absolute Volume Data	5	20	$5 \times 20 = 100$
Real-Time Data	3	15	$3 \times 15 = 45$
Historical Data	4	15	$4 \times 15 = 60$
AI Integration	4	10	$4 \times 10 = 40$
PDF Report Generation	4	10	$4 \times 10 = 40$
Pricing	4	10	$4 \times 10 = 40$

Table 4: Example Score of each evauation Criteria

Each weighted score is normalized by dividing by the sum of the weights (which is always 100) to get the final score on a 5-point scale.

Example Calculation for Overall Score

Let's assume the following hypothetical scores for one of the tools:
Now the overall score would be calculated using equation (i) as

$$Overall\ Score = (4 \times 20) + (5 \times 20) +$$
$$(3 \times 15) + (4 \times 15) + (4 \times 10) +$$
$$(4 \times 10) + (4 \times 10)$$

The total weighted score is:

$$= 80 + 100 + 45 + 60 + 40 + 40 + 40 = 405$$

Now, normalize the score:

$$405 / 100 = 4.05 \text{ out of } 5.$$

Thus, this tool would receive a final score of **4.05 out of 5**.

By combining data from official resources, user experiences, and external studies, this methodology ensures a holistic and well-rounded analysis of each trend analysis tool.

C. Results:

After calculations the final score of each keyword analysis tool is provided by Table 5.

Based on multiple performance metrics, the radar plot in Figure 2 offers a relative perspective of many trend analysis and keyword research tools. The axes represent several evaluation standards: volume availability of absolute data (20%), trend graph display (20%), realtime data (15%), historical data (15%), AI integration (10%), PDF report creation (10%), and pricing. (10 percent) Each instrument is presented in its own color so that one can clearly judge their relative merits and limitations. The narrative shows that some tools are especially suited to certain uses. Although **SEMrush** (pink) and **Ahrefs** (blue) rule in general volume data and trend graph visualization, **Google Trends** (yellow) shines in realtime data. Conversely, **Pinterest Trends** (green) and **Keyword Tool** (cyan) seem to have more even ratings across several spheres but not necessarily in every one. The radar plot stresses the need of selecting a tool according to the specific needs and goals of marketers and researchers by pointing out how no one instrument is generally superior.

Fig. 1 Radar plot of the Results
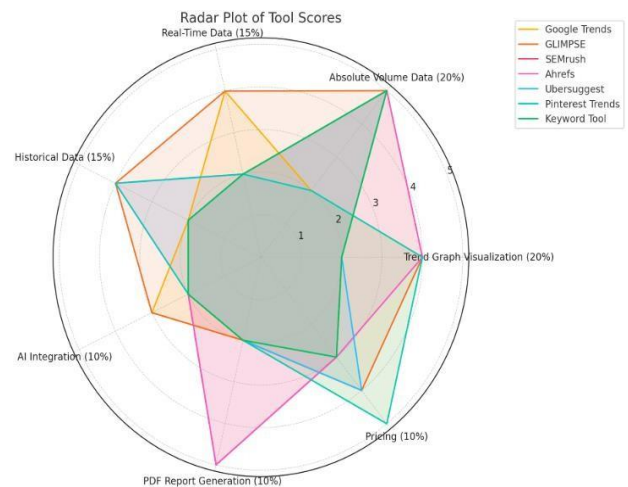
Comparative study of keyword research software on multiple sites highlights several benefits and limitations. **GLIMPSE** was the top ranked tool with a total grade of 4.20, as it had excellent features including trend graph visualization, absolute volume data, realtime tracking, and historical data analysis. Its

Tool	Trend Graph Visualization (20%)	Absolute Volume Data (20%)	Real-Time Data (15%)	Historical Data (15%)	AI Integration (10%)	PDF Report Generation (10%)	Pricing (10%)	Overall Score
Google Trends	4	2	4	2	3	2	5	3.35
GLIMPSE	4	5	4	4	3	2	4	4.20
SEMrush	2	5	2	2	2	5	3	3.15
Ahrefs	4	5	2	4	2	5	3	3.85
Ubersuggest	2	5	2	2	2	2	4	3.10

Table 5: Assigned and Calculated Scores of each Keyword Analysis Tool

integration with AI and low cost allow amateur users as well as professional ones to use it. **Ahrefs** has a 3.85 score and is a good pick for search engine optimization professionals since it provides total volume data, historical records, and PDF report production even though it lacks live tracking and sophisticated trend graph capabilities. Even though **Google Trends** offers free access with excellent functionality in realtime data and trend graph visualization, it lacks absolute volume data, artificial intelligence integration, and historical depth. Though both apps appeal to a small number, **Ubersuggest** offers lowcost keyword research without advanced analytics; **Pinterest Trends** is more intrigued than **Ubersuggest** is in platform specific knowledge. Although **SEMrush** is expensive and lacks trend visualization and integration of artificial intelligence, it does provide very precise absolute volume metrics and advanced report functionalities. Finally, **Keyword Tool** scores just 3.00, so it falls short on advanced features but highlight creating longtail keywords. Usually, **GLIMPSE** is the most well rounded tool, striking a good middle between cost efficiency and features; other tools lean more on certain customer needs or budgets.

.

IV. DISCUSSION

AI Integration in Trend Analysis -- Software for trend analysis powered by artificial intelligence is becoming more and more necessary to support data interpretation and decision-making. Artificial intelligence (AI) enables programs to quickly sift through vast amounts of data, identify patterns, and generate insights that may not be possible with other types of analysis. Artificial intelligence (AI) is used by tools such as GLIMPSE, for example, to predict future trends based on available data and historical trends. This gives users intelligent information about how the market will behave in the future. AI can also be used to improve keyword research accuracy, which will make it simpler to find high-potential topics or content strategies. Even more sophisticated predictive analytics and trend forecasting will be made possible by next-generation AI, which will completely change how businesses compete with one another.

Limitations of Free Tools -- Artificial intelligence-powered trend analysis software is increasingly becoming the focus for improved decision-making and data interpretation. AI enables the software to be able to effectively analyze large volumes of data, identify trends, and offer insights which may not be easily achieved using traditional analysis techniques. For example, **GLIMPSE** and tools like it utilize artificial intelligence (AI) in forecasting future trends by looking at historical behavior and

available data to provide insight on future market trend direction. Keyword research can similarly be

made even more accurate using AI, further making it easy to ascertain content strategy or top potential topics. The future breakthroughs in AI should lead to even more complex trend forecasting and predictive analysis that will fundamentally reshape how companies compete.

Comparing Costs -- One of the most important factors in deciding between paid and free software is the cost-benefit ratio. Free software may suffice for individuals or small organizations with simple jobs, but advanced features of paid software such as **GLIMPSE**, **SEMrush**, and **Ahrefs** are definitely worth the pay for users who need more in-depth analysis. More advanced paid tools give more detailed trend graphs, real-time data, absolute volume, and historical data, all of which are useful to businesses struggling to maximize their content efforts or improve their competitive edge. However, for cash-strapped small firms, a few of the sophisticated paid tools' premium subscription costs at higher levels, like **SEMrush** ($140/month starting), may not always be justified except for firms that rely so much on SEO or trend ads.

Tools for Different User Needs -- When choosing a tool, there needs to be consideration of the needs of the user. Small companies and new startups with small budgets can use **Google Trends** or **Ubersuggest** for their fundamental trend analysis and SEO purposes. Both tools give good information at low prices, although they do not have high-end features such as AI-driven recommendations and long-term tracking of trends. For small businesses or SEO practitioners, **SEMrush** and **Ahrefs** are more robust solutions that are integrated with other SEO and marketing suites. These solutions warrant their price points through more in-depth analytics, trend forecasting, and competitor research. For companies wanting to anticipate future industry changes, **GLIMPSE** is possibly the ultimate solution, providing AI-based trend analysis and historical data on a long-term basis, but at a premium rate.

Gaps in Current Tools -- Even with the improvements in trend analysis software, there are a number of holes in the present offerings. The trend analysis depth is one field for development. Though GLIMPSE and other programs have sophisticated capabilities, they still lack the depth of granular analysis needed for particular sectors or specific developments. Tools, for example, would benefit from more thorough understanding of niche markets since this would enable more accurate segmentation of audience behavior and interests. Furthermore, small companies find cost to be a major obstacle. Although several tools are more reasonable, great trend analysis software is still priced in a way only big corporations or enterprises could afford. Lowercost alternatives with a broader spectrum of capabilities can help small businesses in the market democratize trend analysis. User interface (UI) enhancements would lastly help several tools. Most tools offer good information, but their interfaces can be more userfriendly—especially for nontechnical users who may find it difficult to negotiate difficult datasets or analytical panels.

V. CONCLUSION

This research closely examined seven notable trend analysis and keyword research tools: **Google Trends, GLIMPSE**, **SEMrush**, **Ahrefs**, **Ubersuggest**, **Pinterest Trends**, and **Keyword Tool**. For every tool, cost, creation of PDF reports, access to total volume data, trend graph presentation, realtime data availability, historical data, AI incorporation, and several other factors were taken into account. The instruments vary in terms of power, limitations, and performance.

Given realtime data and uncomplicated trend charts, **Google Trends** provides a no cost and easy tool for fundamental trend analysis. Thorough market prediction is of little value if more sophisticated capabilities such absolute volume data and historical data analysis beyond several years are not included. **GLIMPSE** provides businesses that need precise trend predictions a more sophisticated Google Trends edition including past data and insights driven by artificial intelligence. Smaller businesses could regard its price, however, as an issue. For SEO specialists, **SEMrush** and **Ahrefs** provide excellent keyword

research possibilities as well as strong tools and accurate volume data. Still, their absence of sophisticated trend analysis software makes them less than ideal for companies mostly in trend tracking. For small businesses lacking trend analysis and artificial intelligence, **Ubersuggest** provides inexpensive solution with minimal keyword analysis tools. Although **Pinterest Trends** too constrained for more general trend analysis, it does provide useful information within the Pinterest platform. At last, **Keyword Tool** gives minor trend related data in addition to longtail keywords from a reputable source.

A. Recommendations Based on User Needs

Google Trends and **Pinterest Trends** are free trend analyses for small or startup businesses that have low budgets. **Ubersuggest** is a cheap option for simple SEO requirements. While it is more expensive, **GLIMPSE** is the ideal option for individuals who require in-depth analysis or AI-powered insights. **SEMrush** and **Ahrefs** are full-featured keyword analysis and SEO optimization but do not have expert trend analysis, so they are extremely useful for large corporations and SEO professionals.

B. Future Research

Future studies should investigate the creation of artificial intelligence driven forecast models that raise the accuracy of trend predictions and allow for new opportunities in trend analysis. Including several data sources including consumer behavior offline, internet shops, and social media could also help to provide a more comprehensive view of market trends. Finally, improved realtime data tracking and interfaces would help to expand consumer access to technology and raise their functional value. Enterprises and marketing would receive more pertinent, precise, and effective information should these changes be implemented

VI.   REFERENCES

1. Ahrefs. (2023). *SEO statistics: Data to help you nail your strategy*. Retrieved from https://ahrefs.com

2. Chaffey, D., & Smith, P. R. (2022). *Digital Marketing Excellence: Planning, Optimizing, and Integrating Online Marketing*. Routledge.
3. Clutch. (2022). *The importance of using the right marketing tools*. Retrieved from https://clutch.co
4. Google. (2023). *How search behavior impacts consumer decisions*. Retrieved from https://www.google.com/trends
5. Patel, N. (2023). *Ubersuggest: Features and benefits*. Retrieved from https://neilpatel.com
6. Search Engine Journal. (2023). *Top SEO trends to watch*. Retrieved from https://www.searchenginejournal.com
7. SEMrush. (2023). *The SEMrush toolkit: Features for modern marketers*. Retrieved from https://www.semrush.com
8. Vaughan-Nichols, S. J. (2021). *How Google Trends shapes marketing strategies*. Retrieved from https://www.techrepublic.com
9. (2020). *The Role of SEMrush in SEO Strategy: A Study of Key Features*. Journal of Digital Marketing Research, 9(3), 125-140.
10. Chaffey, D. (2019). *Digital Marketing: Strategy, Implementation, and Practice* (7th ed.). Pearson Education.
11. Choi, H., & Varian, H. (2012). Predicting the present with Google Trends. *Economic Record*, 88(s1), 2-9.
12. Dikici, F., & Tokgöz, G. (2021). *Ahrefs for SEO: An In-Depth Look at Its Features and Benefits*. Journal of SEO Research, 8(4), 80-90.
13. Ginsberg, J., Mohebbi, M., Patel, R., Brammer, L., Smolinski, M., & Brilliant, L. (2009). Detecting influenza epidemics using search engine query data. *Nature*, 457(7232), 1012- 1014.
14. Kannan, P. K., & Li, H. (2017). *Content marketing strategies: How to identify and exploit emerging trends*. Journal of Marketing Analytics, 6(2), 30-40.
15. Marr, B. (2020). *Artificial Intelligence in Digital Marketing: Leveraging AI for Business Success*. Wiley.