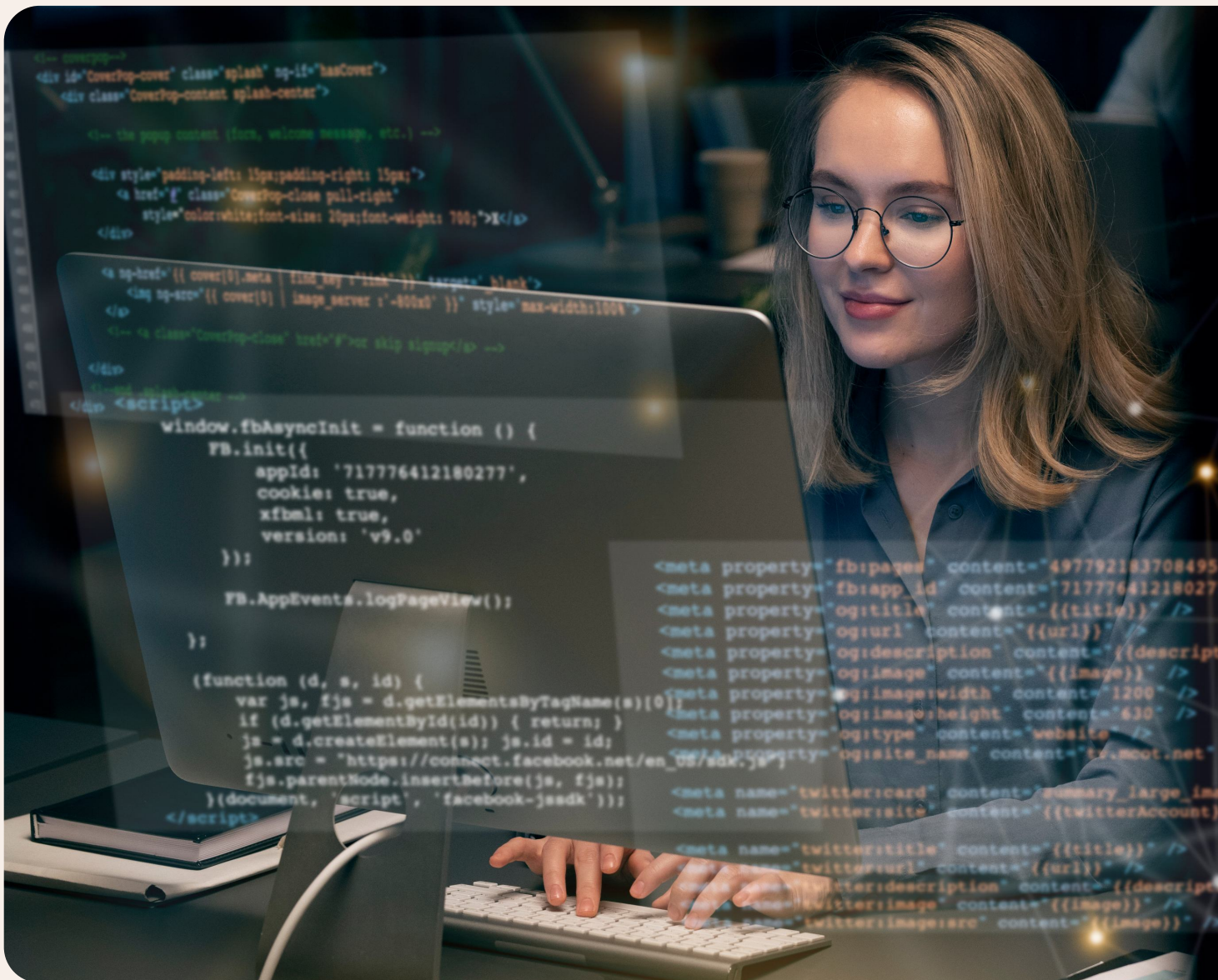


Deploying Gemini for Google Cloud for visual data extraction



Solution overview

DeepSights™: An AI-driven insights management solution

DeepSights is an award-winning, AI-powered insights management solution from market leader Market Logic, built to transform data into actionable insights for consumer-focused businesses. Designed to unlock the value of proprietary knowledge, it allows users to ask natural language questions and receive answers from a range of reports, studies, and documents — making insights more accessible and actionable across the organization.

The challenge

Handling unstructured data within reports, especially visual information, has long been a challenge for businesses. Key insights in research and market data are often conveyed through charts, tables, and infographics, which are overlooked or misinterpreted by traditional text-only processing methods.

As a result, a wealth of information — crucial for informed decision-making — remained untapped and underutilized.



To better illustrate the challenge, the two images depict how data in visual formats is processed with standard extraction technology in DeepSights. The first image shows a typical market research report page, including data presented in chart form. The image below demonstrates how this data is extracted using standard text extraction technology.

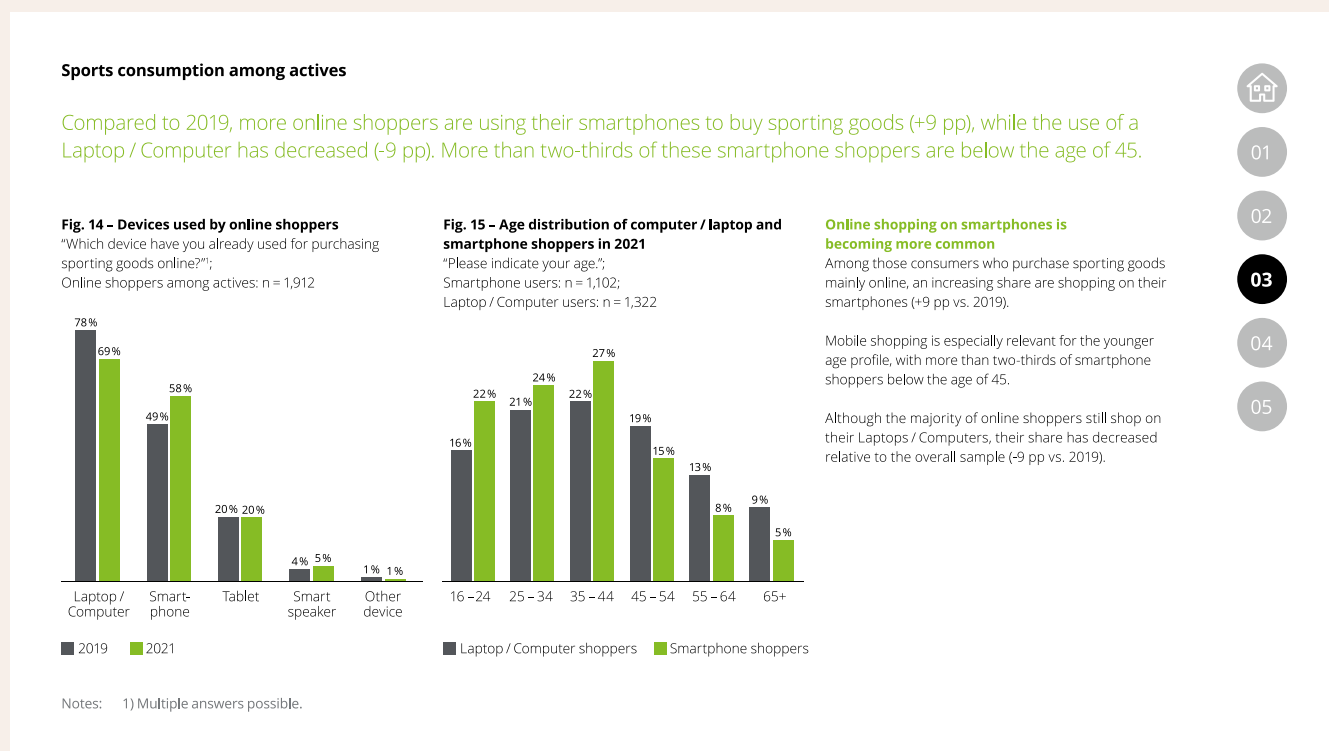


Fig. 1: Example of a typical page including visuals and charts and results of standard text extracting technology

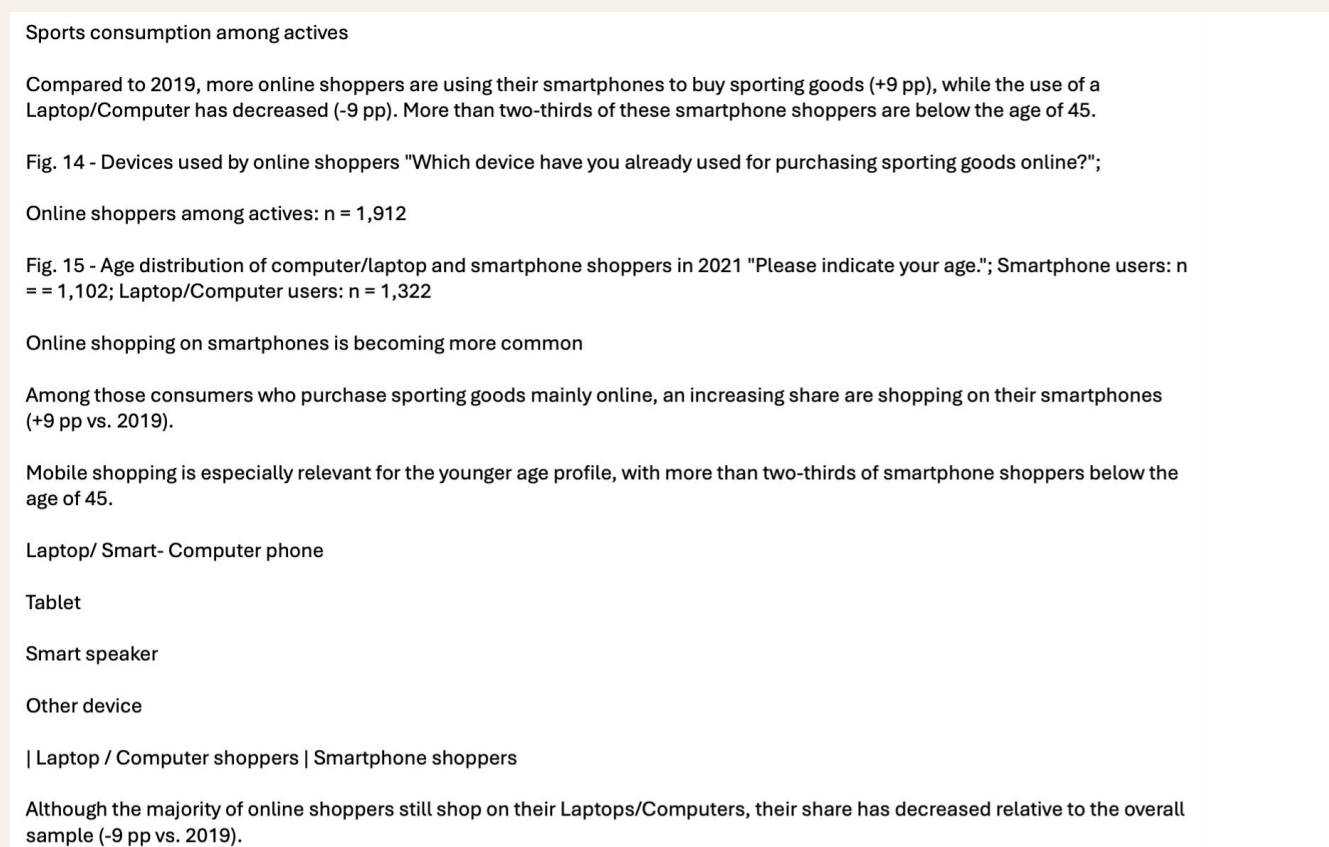


Fig. 2: Example of results of standard text extracting technology from Fig. 1

How Gemini changes the game

With the advent of Vision Language Models (VLMs), a new approach emerged for understanding visuals beyond traditional OCR or text scraping. **After extensive testing of state-of-the-art models, including GPT-4 and Claude, we adopted Gemini 1.5 Flash** for DeepSights, which we found to deliver the superior trade-off solution in terms of quality, speed, and cost.

Key differentiating aspects of the Gemini-based solution include:

- Gemini's ability to turn off content filters, allowing faithful and verbatim extraction of business content from trusted source pages.

This ensures that no critical details are lost during extraction, maintaining the integrity of the original data.

- Use of Chain-of-Thought (COT) multi-step extraction prompts to sequentially perform extraction steps from visual to Markdown. This means that complex visual elements are broken down step-by-step, making the extraction more accurate and understandable for users.
- A long output window of 8k tokens, supporting the full COT response even with complex pages to verbalize. This allows the model to handle large and detailed documents without losing important information.

Gemini for Google Cloud

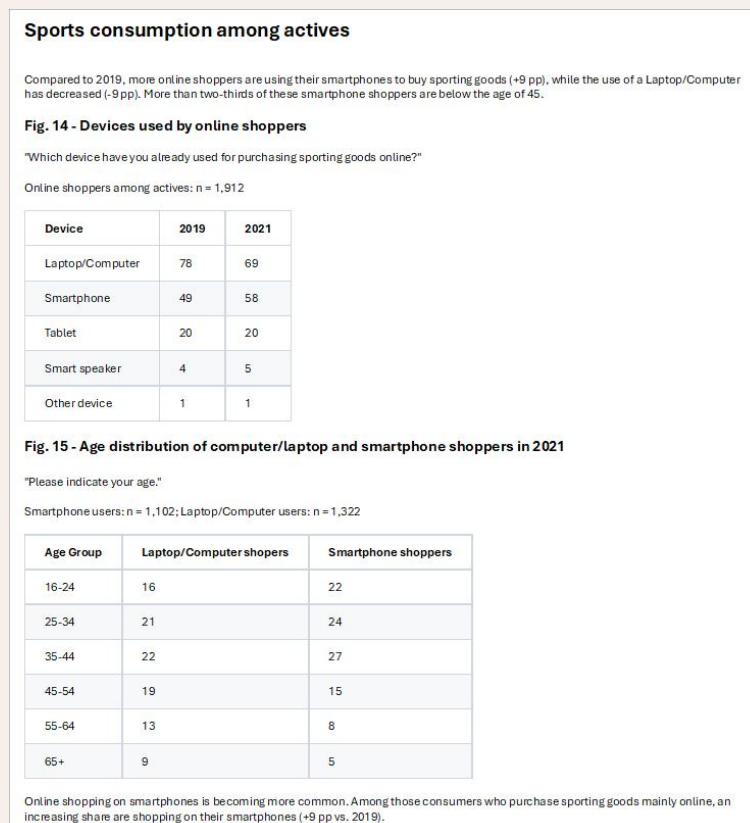


Fig. 3: Example of results with visual extraction technology from Fig. 1

Impact

The implementation of Gemini's visual extraction capabilities has been a game changer for DeepSights users. The enhanced ability to process information means that all the valuable insights contained within charts, tables, and other visuals are now accessible to stakeholders across the business.

By integrating visual extraction into DeepSights, insights are far more comprehensive. The nuance captured from graphical elements leads to deeper understanding and actionable results.

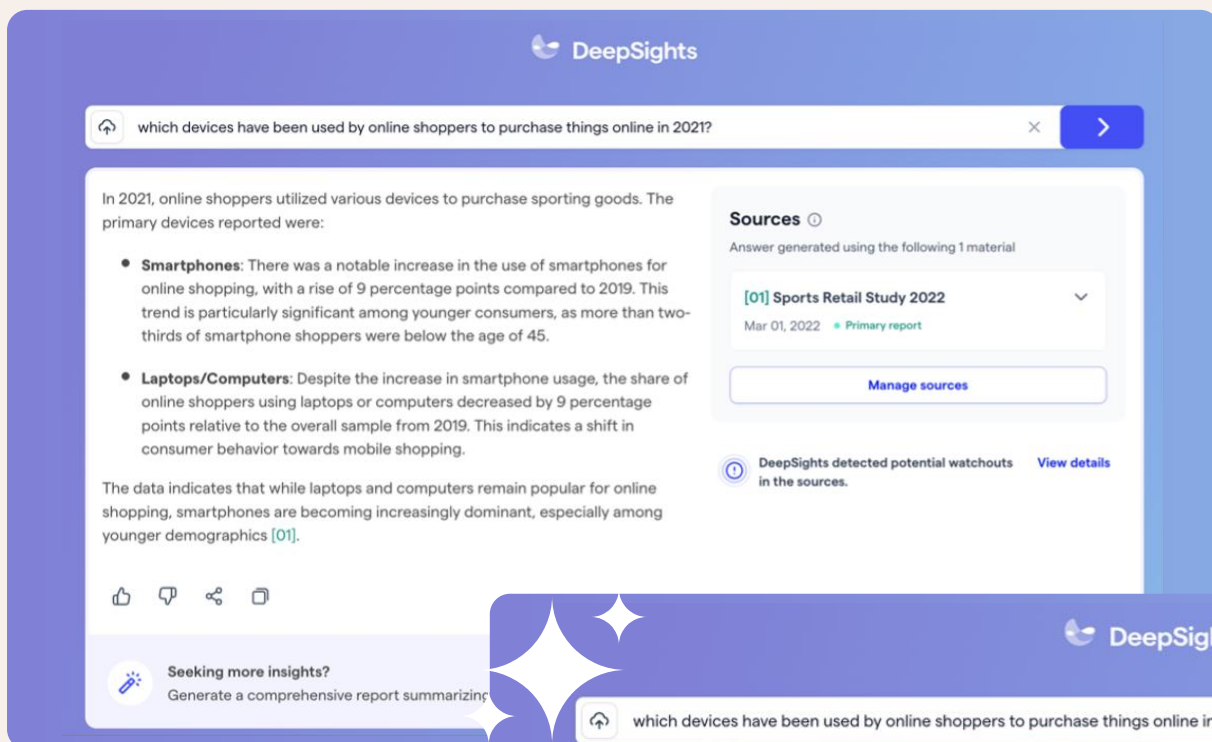


Fig. 4: DeepSights answer without visual extraction

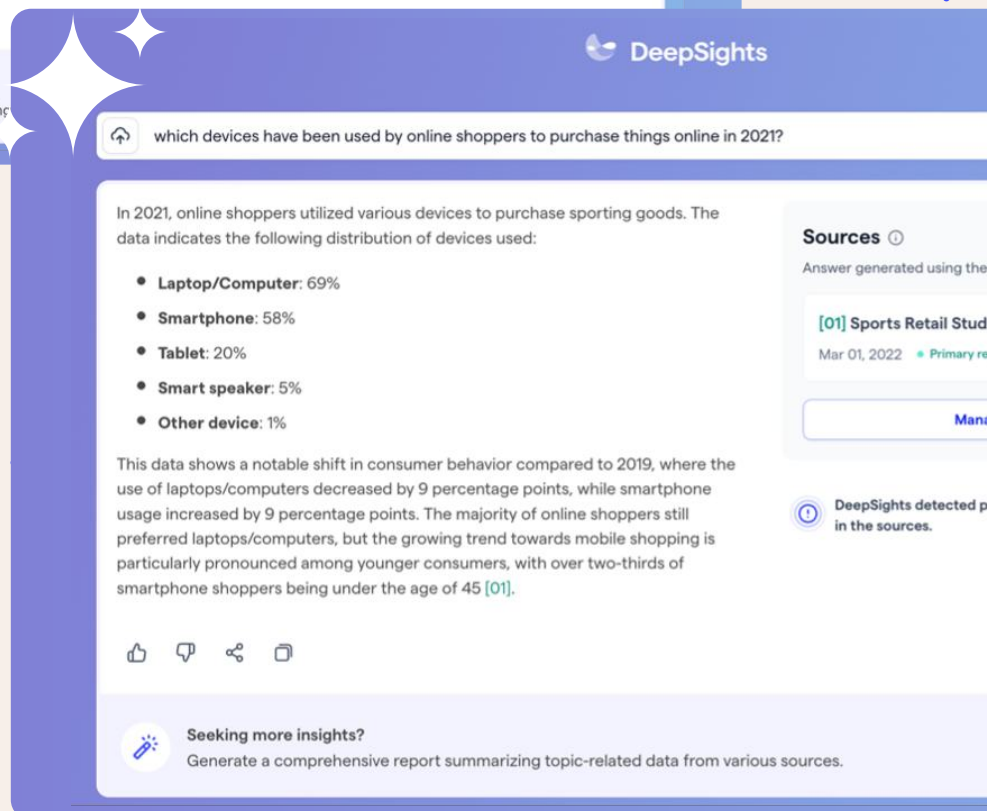


Fig. 5: DeepSights answer with visual extraction



About Market Logic

Market Logic is a market leading SaaS provider of insights management solutions. Our award-winning AI-enabled insights management platform DeepSights™ allows insights teams to equip business decision-makers with trusted insights at scale and speed. Since 2006, we've helped hundreds of consumer-focused brands across the globe to transform into insights-driven businesses. Market leaders such as Unilever, Vodafone, and Tesco are driving innovation and making smarter market moves with the support of Market Logic.

www.marketlogicsoftware.com
info@marketlogicsoftware.com

Interested in a personalized demo? Get in touch with us here:

[Request a demo](#)

Ready to purchase? Start your journey now on Google Marketplace:

[Start now](#)

Europe

Franklinstrasse 28
10587 Berlin,
Germany

North America

223 W. Jackson
Blvd, Suite 525,
Chicago, IL
60606, USA

2024 © Market Logic AG. The information contained in these documents may not be used, published or redistributed without the prior written consent of Market Logic Software AG, Franklinstraße 28, 10587 Berlin, VAT Nr. DE 249354497