A comparison of a bar graph

AI-generated content may be incorrect.

A graph of a product

AI-generated content may be incorrect.

Top 10 Products with Most Misleading Reviews:

Product ID Review Count Misleading Count Misleading Rate (%)

235466 B01G8JO5F2 4885 349 7.144319

10191 B000G2BESO 2777 345 12.423479

291175 B0714HKV2V 1231 234 19.008936

3396 B0001ZWPI4 2007 208 10.363727

72523 B0077L8YFI 1960 196 10.000000

99268 B00BR1FSU8 1616 192 11.881188

402416 B07HSF5HTX 1249 175 14.011209

48987 B00478UIB2 1434 174 12.133891

26865 B001LF39RO 1331 168 12.622089

54074 B004O2A29E 1324 167 12.613293

A graph with orange and blue lines

AI-generated content may be incorrect.

A graph of a bar chart

AI-generated content may be incorrect.

🔍 Top 10 Users with Most Misleading Reviews:

User ID Misleading Rate (%) Review Count \

278829 AG375WAXLZ7PIOQKIQ6KQB4J3JVQ 16.761080 3001

411068 AGZZXSMMS4WRHHJRBUJZI4FZDHKQ 5.748306 4871

295695 AG73BVBKUOH22USSFJA5ZWL7AKXA 5.931495 3591

234169 AFQQQ5LGNSQUEBGDCYBAZZE5T3DA 11.207835 1838

128048 AEXYLV5YOYWSLGG47VVECVURA7XQ 12.142857 1400

61742 AEIIRIHLIYKQGI7ZOCIJTRDF5NPQ 4.917355 2420

91073 AEPEDW5FBBJ2XYR2BIJAKUPHCMHA 10.634328 1072

273155 AFZUK3MTBIBEDQOPAK3OATUOUKLA 12.444444 900

60924 AEICZD35OTDYVWA2KPYWN4PDZ2SA 12.428734 877

29391 AEAXAJACFMXIAAH4WOHRMXPSZWFA 18.411552 554

Misleading Count

278829 503

411068 280

295695 213

234169 206

128048 170

61742 119

91073 114

273155 112

60924 109

29391 102

A graph of a bar

AI-generated content may be incorrect.

A graph of a number of people

AI-generated content may be incorrect.

A graph with blue and orange squares

AI-generated content may be incorrect.

**1. Repeated Users Posting Misleading Reviews**

* Users like **AG375WAXLZ7PIOQKIQ6KQB4J3JVQ**, **AGZZXSMMS4WRHHJRBUJZI4FZDHKQ**, and **AG73BVBKUOH22USSFJA5ZWL7AKXA** posted misleading reviews across **hundreds of different products**.
* This behavior is highly suspicious — it suggests either:
  + A **review bot or hired reviewer** targeting many listings.
  + Or someone spamming across multiple products for malicious intent or manipulation.

**📏 2. Long, Vague, or Contradictory Reviews**

* Products like **B0077L8YFI** and **B004O2A29E** have **extremely high mean word counts** (up to 128 words on average, with std devs > 100).
* Such verbosity, especially combined with high variance, can signal:
  + Attempts to sound detailed without saying much (typical of generated spam).
  + Reviews filled with fluff or contradictions (e.g., giving 5 stars but complaining throughout).

**📆 3. Review Clusters in a Short Time Frame**

* Product **B01G8JO5F2** saw a **burst of 20–36 misleading reviews** each month between **Dec 2018 and Oct 2019**.
* This kind of **month-over-month surge** in misleading content strongly hints at **coordinated fake review campaigns** or manipulation waves.

**✅❌ 4. High Rate of Unverified Reviews**

* While most products have <10% unverified misleading reviews, **B0077L8YFI** (20.9%) and **B004O2A29E** (15.5%) stand out.
* A high **unverified rate** weakens trust — these reviews often come from people who **didn’t actually purchase the product**, which is a hallmark of **fake or incentivized feedback**.

**📊 5. Sentiment-Rating Mismatch**

* Products like **B07HSF5HTX** and **B0714HKV2V** show the **largest average mismatch** between predicted sentiment and actual rating (2.36 and 2.26 stars respectively).
* This implies reviewers are giving **ratings that don’t match the emotional content of their text** — for example, a **negative-sounding review with 5 stars**, possibly to game algorithms.