

AMAZON TOY CATEGORIES ANALYSIS - Pricing, Popularity & Positioning















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Data Context / Overview



Store:	Fisher-Price products on Amazon.de
Dataset includes: 	<ul style="list-style-type: none">Key product info (price, old price, discount, stock, reviews count, age, weight, description);Calculated metrics (€/g, price per year, value for money, review density);Keyword flags (emotional, educational, eco); Price buckets:  <10 €  10-20 €  20-30 €  30-40 €  >=40 €Outliers (prices & reviews)
Categories analyzed:	 sustainable toys  wooden toys  baby toys
Purpose:	Provide insights into pricing, popularity, and positioning across toy categories.

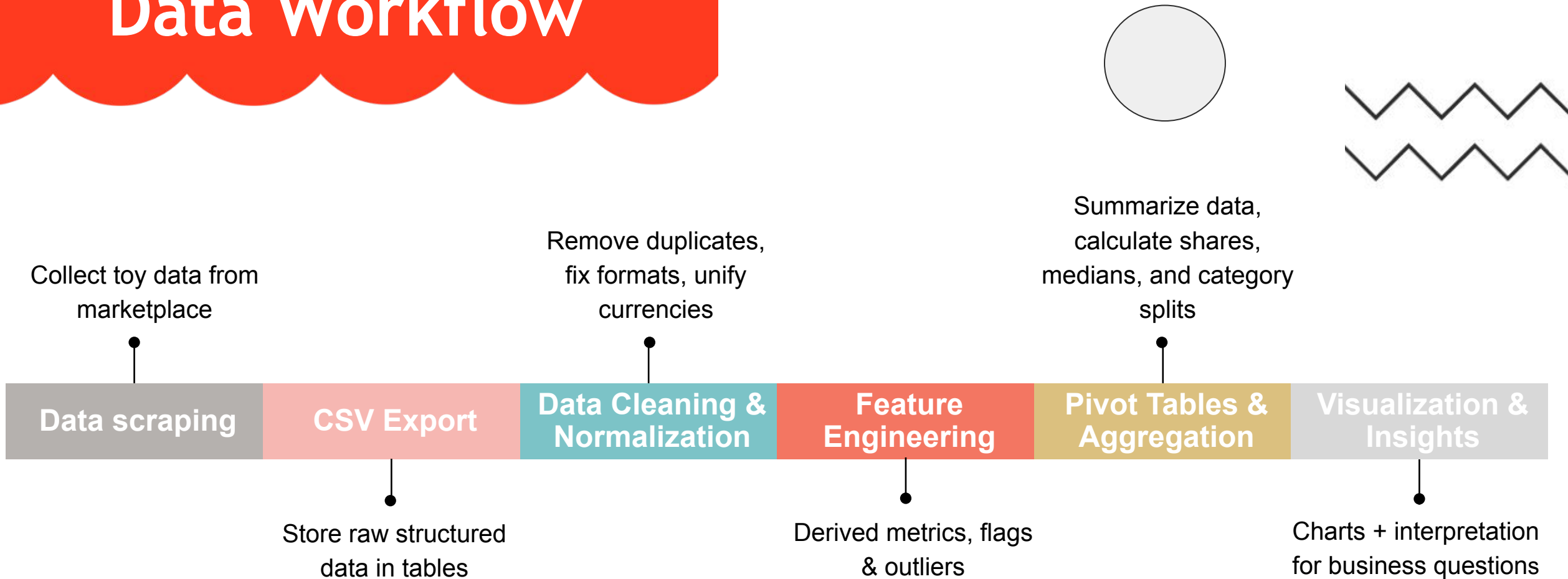
Key product info



price	old_price	discount	stock	reviews_count	min_age	max_age	weight_grams
€12.99	€22.99	43%	16	140	1.50	3.00	1050
€8.53	€9.17	7%	12	31	3.00	7.00	640
€17.47	€19.99	13%	3	157	1.00	3.00	495
€13.90	€15.99	13%		29279	0.25	3.00	470



Data Workflow





Main Research Question:

Which toy categories have the highest potential for sales considering price segments, popularity (reviews), and positioning (keywords)?

Sub-questions:

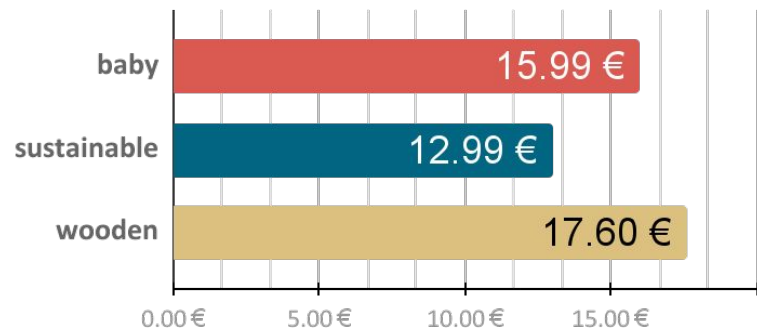
- How do prices and discounts differ across categories?
- Which categories are most popular and why?
- Where is the best balance of price vs value (value for money)?
- How are categories positioned via keywords (emotional, Montessori, eco)?
- Where are anomalies or super-hit products?



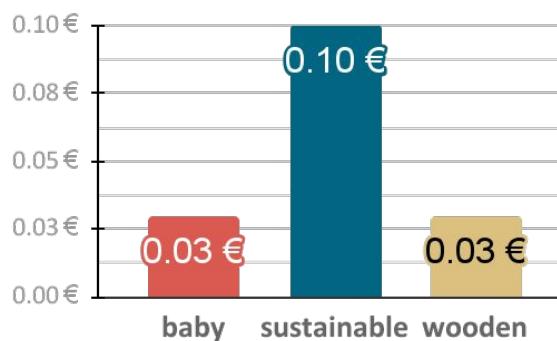
Pricing & Discounts



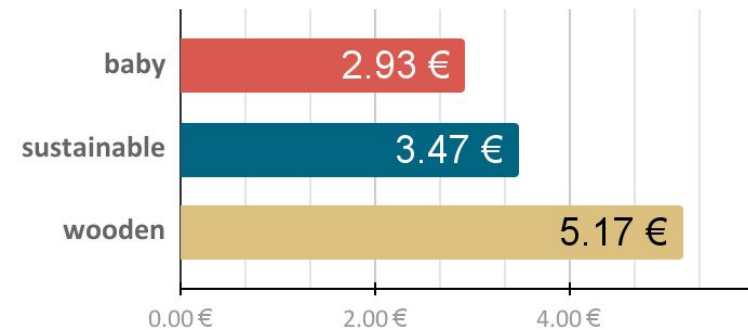
MEDIAN of price/toy_type



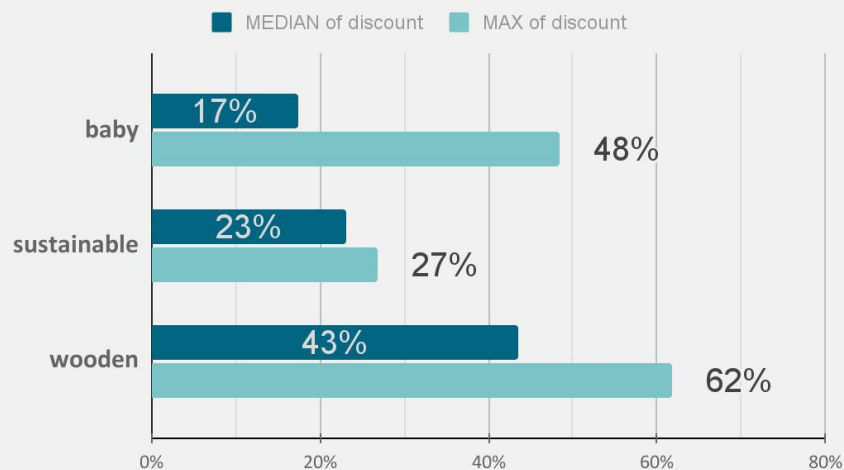
MEDIAN of €/g/toy_type



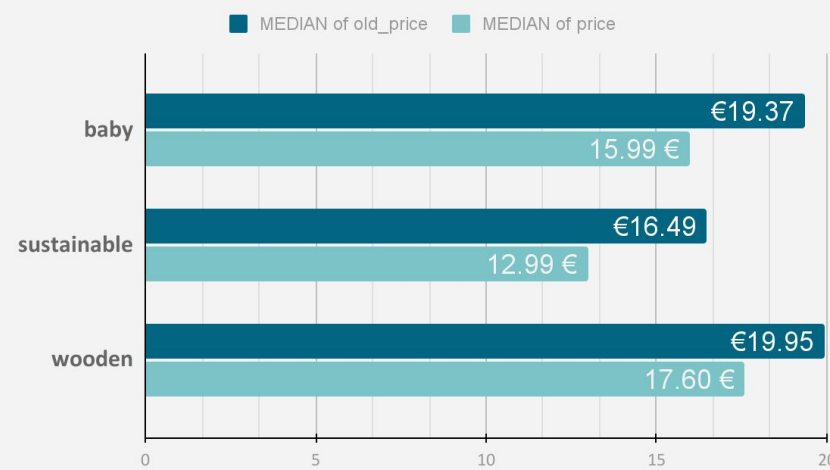
MEDIAN of price_per_year/toy_type



MEDIAN of discount vs MAX of discount



Old_price vs Price (discount policy)



Pricing & Discounts Insights



Wooden: Premium segment - median price €17.60, median price per year €5.17. High median discounts 43% (max 62%) suggest discounts are used to stimulate sales of premium products. Low €/g median (€0.03) suggests higher material density and/or heavier construction, which may indicate premium or durable materials.



Baby: Mid-market segment - median price €15.99, median price per year €2.93. Median discount 17% (max 48%) reflects moderate discounts; median €/g (€0.03) signals accessible materials and mass-market appeal. Highlights strategic focus on wide selection and mass appeal.



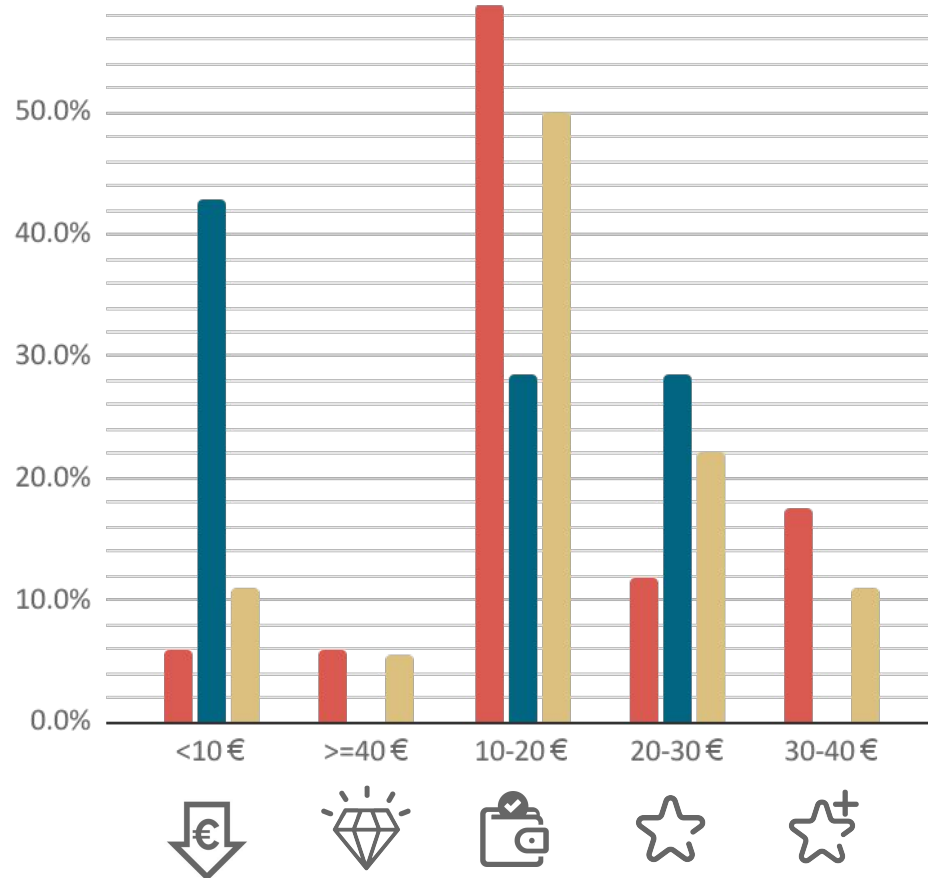
Sustainable: Budget-friendly segment - median price €12.99, median price per year €3.47. Median discount 23% (max 27%) shows moderate, stable pricing. Median €/g €0.10 suggests lighter/smaller items, delivering transparent and “honest” pricing without artificial inflation.



Assortment Insights



Price Segment Distribution



Baby: concentrated in the 10-20 € range, presence in 30-40 € (18%). Very limited budget (<10 € = 6%) and premium (>=40 € = 6%).

This indicates **a strong mid-market focus**, with a smaller but notable premium tier.



Sustainable: almost half are budget (<10 € = 43%), another large share in 10-20 € (29%), and 20-30 € (29%). No presence in premium (>=40 €).

Clearly positioned in **the affordable segment**. Unlike Baby and Wooden, Sustainable avoids premium tiers, emphasizing cost-effective options.

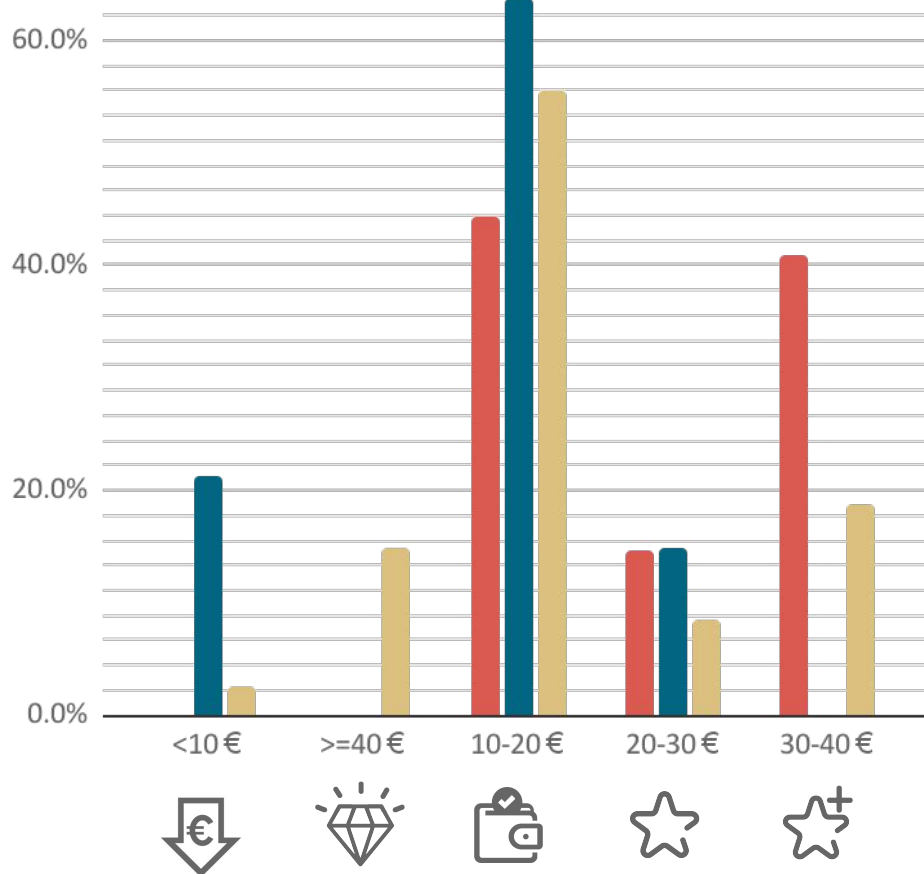


Wooden: majority fall in 10-20 € (50%), with some in 20-30 € (22%) and 30-40 € (11%). Small premium tier (>=40 € = 6%), and very limited budget (11%).

This reflects **a balanced mid-to-premium assortment**, with stronger value perception compared to Baby.

Demand Insights

Review Volume Distribution



Wooden: 10-20 € (56%), plus notable ≥40 € (15%) and 30-40 € (19%) - real premium demand.



Sustainable: concentrated in 10-20 € (64%), some in <10 € (21%) and 20-30 € (15%). No premium.






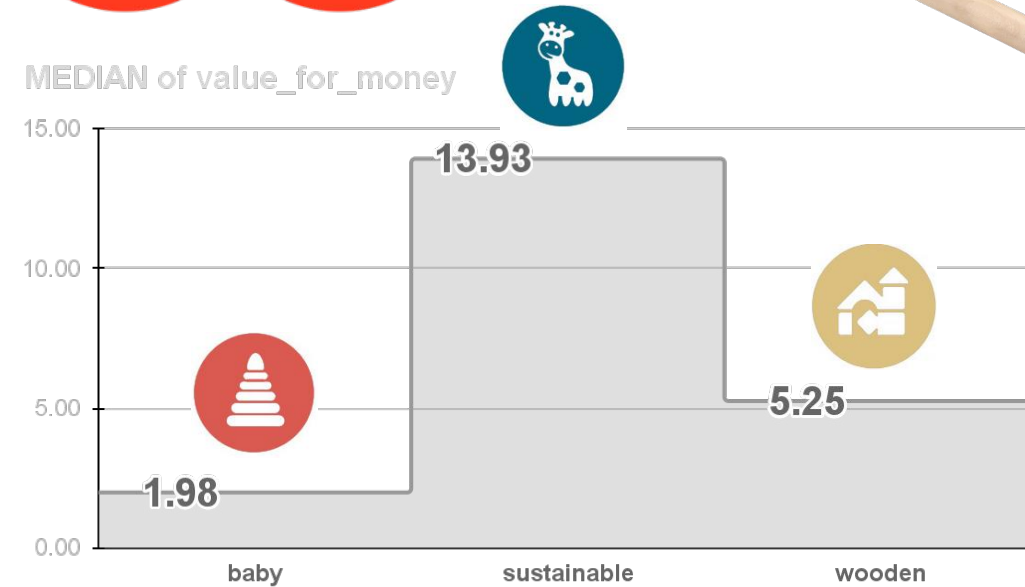
Baby: demand split - 10-20 € (44%) and 30-40 € (41%). Almost no premium (≥40 € = 0,1%).

- All categories show strong mid-range (10-20 €) demand.
- Wooden is unique in showing additional premium demand (≥40 € = 15%) and higher-price interest (30-40 € = 19%).
- Baby shows a dual mid-range peak (10-20 € and 30-40 €). Several super-hit products drive.
- Sustainable remains concentrated in mid-range (10-20 €). Steady, consistent demand.

Customer Perceived Value



	Median Value for Money	Median Reviews	Median Price/Review
	1.98	39	0.091
	13.92	136	0.072
	5.25	83	0.2



Sustainable:

highest value

(13.93), consistent popularity (median reviews = 136).



Wooden:

moderate value

(5.25), higher price per review (0.2) - premium positioning.



Baby:

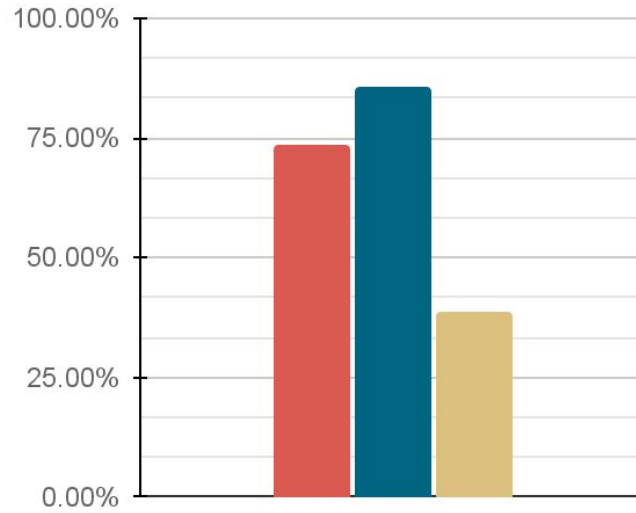
low value (1.98)

despite moderate popularity - mid-market with super-hit products driving reviews.

Positioning & Keywords



Emotional Triggers

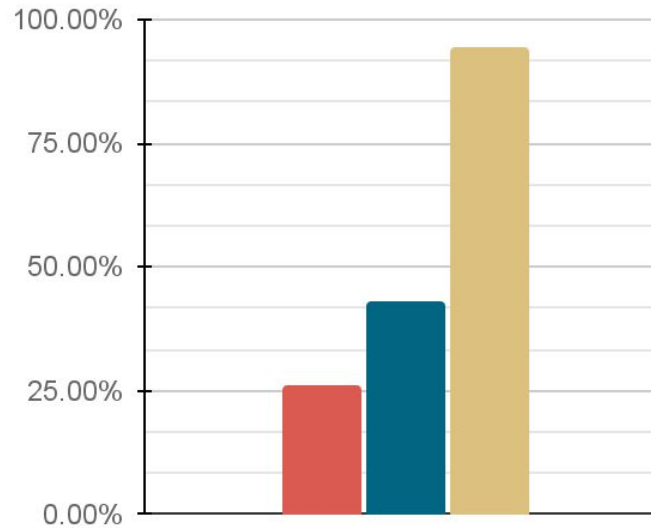


86% - Sustainable

74% - Baby

39% - Wooden

Eco-friendly & Sustainable

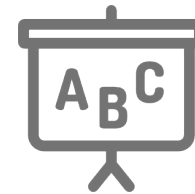
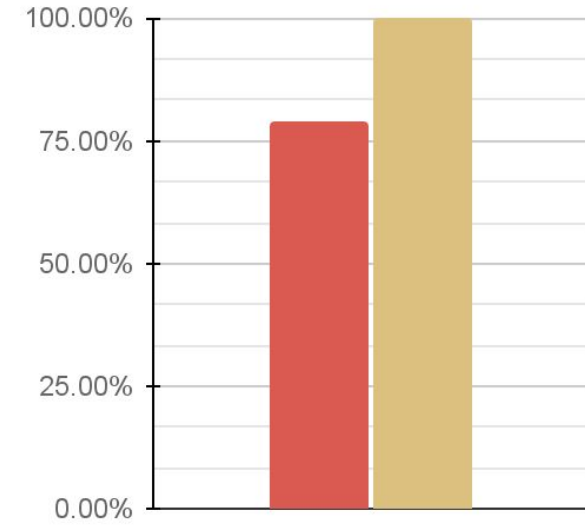


94% - Wooden

43% - Sustainable

26% - Baby

Montessori/Educational



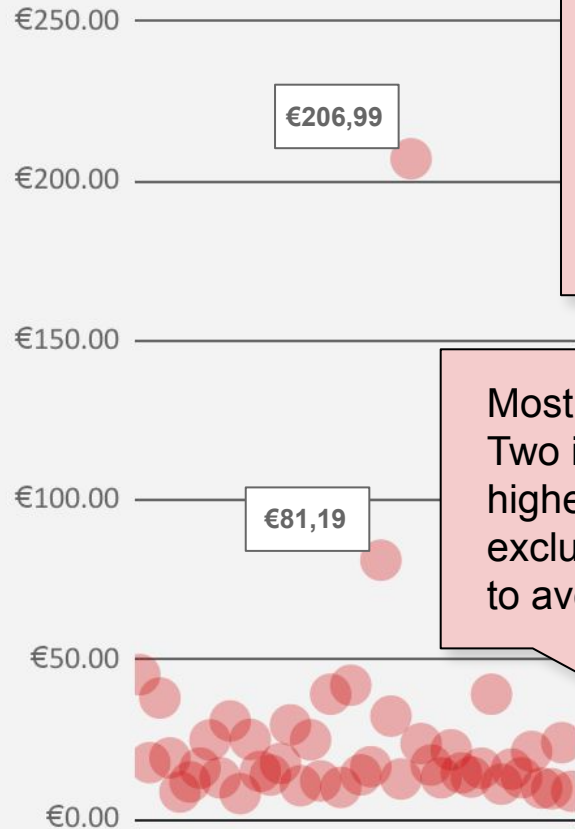
100% - Wooden

79% - Baby

0% - Sustainable

Outliers & Anomalies

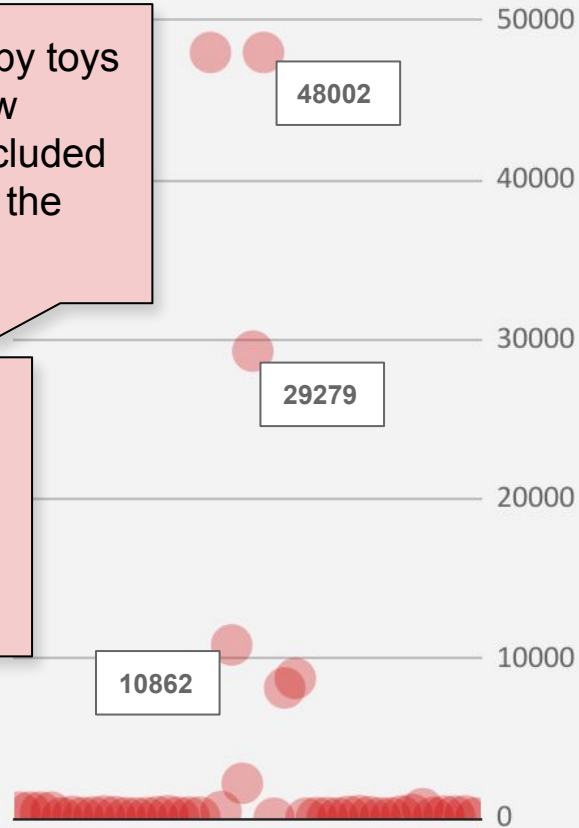
Price Outliers Across All Toys





















A few “super-hit” Baby toys show extreme review counts and were excluded to maintain clarity in the analysis.

Most toys fall around €50. Two items are significantly higher in price and were excluded from the analysis to avoid skewing results.

Review Count Outliers Across All Toys



Category Insights (Summary Table)

Category	Assortment Focus	Demand & Reviews	Perceived Value	Positioning (Emo/Eco/Edu tags)
	59% in 10-20 €, 18% in 30-40 €, limited budget and premium. Mid-market + higher-mid	Demand split: 44% in 10-20 €, 41% in 30-40 € (dual peak) A few “super-hits” in <10 €  	1.98 	 - 79%  - 74%
	43% <10 €, 29% in 10-20 €, 29% in 20-30 € Budget + mid-market, no premium	Highly concentrated 64% in 10-20 € Steady mid-range 	13.93 	 - 86%  - 43%
	50% in 10-20 €, 22% in 20-30 €, 11% in 30-40 €, limited budget and premium. Mid-to-premium	Unique premium demand (15% in >=40 €, 19% in 30-40 €)   	5.25 	 - 100%  - 94%

*  Baby  Sustainable  Wooden

Business Recommendation & Strategy

Main Question:

Which toy categories have the highest sales potential considering price segments, popularity, and positioning?

Answer:

- **Baby** - Mass-market, high demand, but crowded - short-term *volume strategy*
- **Wooden** - Premium, low competition, strong eco/educational perception - *strategic brand positioning in high-value segment*
- **Sustainable** - Budget-friendly, stable demand - *core eco line, niche but reliable*



Limitations & Next Steps

Limitations:

- Single store data only
- Focused on 3 base categories: Wooden, Sustainable, Baby (all non-Wooden, non-Sustainable); functional/marketing ones overlap and were excluded
- Quantitative scope only (price, reviews, keywords)
- Seasonality, marketing, social trends not included

Next Steps:

- Collect data from 10–15 stores / marketplaces
- Analyze social media trends (TikTok, Instagram, Pinterest)
- Conduct detailed review text analysis: frequency, pain points
- Competitive analysis: prices, positioning, promo messages
- Consider seasonality and marketing campaigns





Data: Amazon.de (scraped, 2025)

Images: Open web sources (Google Images / product pages), used for educational & non-commercial portfolio purposes only