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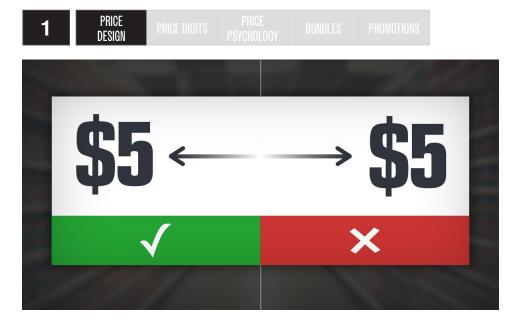
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PRICE DESIGN



PLACE PRICES TOWARD THE LEFT

Prices seem cheaper on the left.

Where should you place a price?

Try the left side.

WHY IT WORKS

- → **Left = Small**. Cultures that read from left to right conceptualize number lines in which *small* numbers appear toward the *left*, connecting these two ideas of *small* and *left* (Cai et al., 2012).
- → **Right** = **Finger Path**. Mobile users need to cross over prices if they're located toward the right, orienting their attention toward prices and discouraging them from buying.

(see fig 1)

→ **Right** = **Heavy**. Prices feel heavy toward the right because of a downward pulling motion: "our eyes enter a visual field from the left, [so] the left naturally becomes the anchor point or 'visual fulcrum.' Thus, the further an object is placed away from the left side (or the fulcrum), the heavier the perceived weight" (Deng & Kahn, 2009, p. 9).

HOW TO APPLY

Try **The Cliff Test** to judge whether a price feels expensive:

- 1. Center your price on a cliff
- 2. If it falls, then it feels expensive

(see fig 2)

Alternatively, if you can't move the price, insert stimuli on the left to counterbalance the weight.

(see fig 3)

CAVEATS

→ Place Calls to Action Toward the Right. Prices seem cheaper on the left, but interactions (e.g., buttons) feel more clickable toward the right because most people are right-handed (and these actions feel easier to do; Casasanto, 2009).

Cai, F., Shen, H., & Hui, M. K. (2012). The effect of location on Price estimation: understanding number-location and number-order associations. Journal of Marketing Research, 49(5), 718-724.

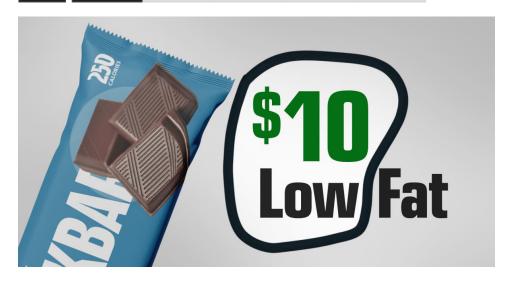
Deng, X., & Kahn, B. E. (2009). Is your product on the right side? The "location effect" on perceived product heaviness and package evaluation. Journal of Marketing Research, 46(6), 725-738.

Casasanto, D. (2009). Embodiment of abstract concepts: good and bad in right-and left-handers. Journal of Experimental Psychology: General, 138(3), 351.









GROUP SMALL WORDS NEAR A PRICE

Prices seem cheaper next to small-related words (e.g., low, tiny, little).

Customers group items that are close together.

It's called gestalt proximity.

And there's a fascinating implication: Perceiving items as a unit will merge their semantic traits. I call it *convergent processing* (see my book The Tangled Mind).

For example, the price of an inline skate seemed cheaper next to the words "low friction" because the price was grouped with the idea of lowness, merging these two stimuli into a single concept. The price seemed more expensive next to "high performance" (Coulter & Coulter, 2005).

It should also happen with:

- → Low Fat
- → Low Risk
- → Low Maintenance

Or be more direct. Why not say that your price is small?

A "small \$5 fee" seemed cheaper than a "\$5 fee" (Rick et al., 2008).

Other examples of smallness:

- → Only \$39.99
- → Just 3 payments of \$29
- → For a *low price* of \$89.95

Likewise, avoid "big" words. Perhaps the following coupon should emphasize *pizza* instead of *large*.

(see fig 1)

Of course, you should embrace big words for promotions (e.g., *Prime Big Deal Day*) or any occurrence in which largeness is desirable.

STRONGER FOR

→ **Grouping**. Customers need to group prices with a size cue. Tweak your design to encourage this grouping, like bolding (e.g., buy it now for **only \$199**).

HOW TO APPLY

→ Assign a Primitive Name to Pricing Plans. While naming SaaS plans, you might be tempted to choose a fancy name (e.g., premium, platinum) to enhance perceived value. And sure, maybe you'll succeed. But these names also feel more expensive. Try primitive names — Starter, Basic, Essential — so that you imply a small size and social norm. Indeed, customers are

more likely to buy cheaper tiers when they see prestige names (e.g. Silver-Gold-Platinum; Wang et al., 2024).

(see fig 2)

(see fig 3)

Coulter, K. S., & Coulter, R. A. (2005). Size does matter: The effects of magnitude representation congruency on price perceptions and purchase likelihood. Journal of Consumer Psychology, 15(1), 64-76.

Rick, S. I., Cryder, C. E., & Loewenstein, G. (2008). Tightwads and spendthrifts. Journal of consumer research, 34(6), 767-782.

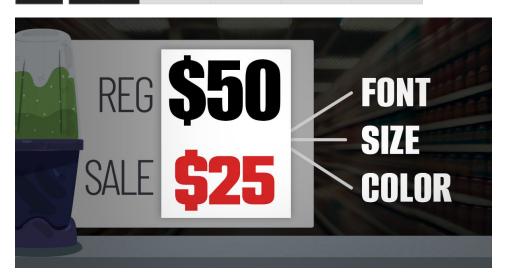




	¥23	¥28	¥32		3
BRONZE-SILVER-GOLD	22%	58%	19%	n = 36	3
SILVER-GOLD-PLATINUM	44%	44%	12%	n = 50	
				-	

CUSTOMERS BUY HIGHER-TIERED PLANS WITH PRIMITIVE NAMES

WANG, L., DENG, X., & CHEN, H. (2024). A ROSE BY ANY OTHER NAME WOULD SMELL AS SWEET? THE IMPACT OF HIERARCHICAL LABELING ON CONSUMERS' CHOICES IN TIERED PRICING PLANS. MARKETING LETTERS, 35(2), 259-273.



MAKE SALE PRICES LOOK DIFFERENT

A visual difference feels like a numerical difference.

Visual differences are meaningful.

Two prices seem further apart when they look different. Why? Because this visual change feels like a numerical change: Hmm, this sale price feels different. Must be a great deal.

That's why infomercials show problems in grayscale, yet solutions in vibrant color. Viewers conflate this drastic difference to a semantic difference: Hmm, this product will make a big difference in my life.

Always polarize the visual traits of your price so that it looks different from a higher reference point, like an MSRP.

DISTINGUISH A SALE PRICE BY:

- → Color. Try a red sale price (Puccinelli et al., 2013).
- → **Digit Type**. Customers prefer a discount from **\$48.63** to **\$39** because the digit type is changing from precise to round. And it's even stronger when you discount from round to precise (e.g., \$49 to \$38.63; Kim et al., 2023; Peev, & Mayer, 2017).

- → Font Family. Enticing prices are more appealing in ugly fonts because customers spend more time and effort reading them, forcing them to notice these good deals (Motyka et al., 2016).
- → **Font Size**. Sale prices should be visually smaller or larger than MSRPs. Larger fonts convey a good product, while smaller fonts convey a good deal (Aggarwal & Vaidyanathan, 2016; Bhattacharyya et al., 2023).

(see fig 1)

Aggarwal, P., & Vaidyanathan, R. (2016). Is font size a big deal? A transaction-acquisition utility perspective on comparative price promotions. Journal of Consumer Marketing, 33(6), 408-416.

Bhattacharyya, A., Jha, S., Guha, A., & Biswas, A. (2023). Should firms display the sale price using larger font?. Journal of Retailing, 99(1), 17-25.

Coulter, K. S., & Coulter, R. A. (2005). Size does matter: The effects of magnitude representation congruency on price perceptions and purchase likelihood. Journal of Consumer Psychology, 15(1), 64-76.

Kim, J., Jhang, J., Kim, S., & Stylidis, D. (2023). The impact of Price preciseness, Price reduction, and lay rationalism on travelers' perceptions of deal attractiveness, purchase intention, and choice. Journal of Travel Research, 62(7), 1550-1568.

- Liang, S., Dong, X., Yan, Y., & Chang, Y. (2021). The influence of the inconsistent color presentation of the original price and sale price on purchase likelihood. Frontiers in Psychology, 12, 603754.
- Mead, J. A., & Hardesty, D. M. (2018). Price font disfluency: Anchoring effects on future price expectations. Journal of Retailing, 94(1), 102-112.
- Motyka, S., Suri, R., Grewal, D., & Kohli, C. (2016). Disfluent vs. fluent price offers: Paradoxical role of processing disfluency. Journal of the Academy of Marketing Science, 44, 627-638.
- Peev, P. P., & Mayer, J. M. (2017). Consumer perceptions of precise vs. just-below prices in retail settings. Journal of Promotion Management, 23(5), 673-688.
- Puccinelli, N. M., Chandrashekaran, R., Grewal, D., & Suri, R. (2013). Are men seduced by red? The effect of red versus black prices on price perceptions. Journal of Retailing, 89(2), 115-125.
- Shoham, M., Moldovan, S., & Steinhart, Y. (2018). Mind the gap: How smaller numerical differences can increase product attractiveness. Journal of Consumer Research, 45(4), 761-774.





SHOW TWO MULTIPLES OF A PRICE NEARBY

Something will "feel right" about the price.

Nearby digits can impact prices.

For example, which ad is better:

- → 4 small pizzas with unlimited toppings for \$24
- → 4 small pizzas with 6 toppings for \$24

Customers prefer the second ad because 4 and 6 are multiples of \$24. Even though this deal is economically worse, it just feels right (King & Janiszewski, 2011).

Seeing two numbers (e.g., 4 and 6) will immediately activate the sum (e.g., 10) and product (e.g., 24; Baroody 1985). If a price matches these numbers, something just feels right

HOW TO APPLY

Insert different numbers near your price:

- → \$15: Get \$5 off the next 3 days
- → \$120: Get 4 weekly 30-minute calls
- → \$500: Get 5 bonus PDFs for free (\$100 Value)

CAVEATS

→ **Show Only Two Multiples**. If your price is \$12, don't show many multiples (e.g., 2, 3, 4, and 6). You need two digits (e.g., 4 and 6) in order to activate the sum (e.g., 10) or product (e.g., 24; Baroody 1985).

Baroody, A. J. (1985). Mastery of basic number combinations: Internalization of relationships or facts?. Journal for Research in Mathematics Education, 16(2),

King, D., & Janiszewski, C. (2011). The sources and consequences of the fluent processing of numbers. Journal of Marketing Research, 48(2), 327-341.





DISPLAY IMMEDIATE PRICES IN LARGE FONTS

Large fonts appear closer, influencing customers to buy sooner.

Font size can influence prices.

In the past, I've suggested *reducing* font sizes because a visually smaller number feels numerically smaller: *Hmm, something about this price feels small. Must be cheap* (Dehaene, 1992; Coulter & Coulter, 2005).

I've seen A/B tests that confirm this idea.

However, small fonts are difficult to implement in real-world settings because they degrade the user experience: It can feel like you're hiding these prices.

Even though large fonts can depict prices as more expensive, you can still make them work if you show an MSRP. As long as your price is visually larger than an MSRP, a large font can become persuasive because this difference feels like a numerical difference: *Hmm, how different is this sale price? Something feels different. Must be a great deal.*

But what if you show a single price? Well, large fonts can also work for *immediate decisions*.

For immediate decisions, zoomed-in images convert better because customers imagine these decisions with a closer proximity — as if they are physically closer to them (Ho et al., 2024).

(see fig 1)

Same with font sizes: Large fonts might convert better for immediate decisions because they imply a closer proximity.

USE BIG FONTS FOR

- → Immediate Decisions. A typical SaaS plan.
- → **Urgent Appeals**. Deal that expires in 24 hours.

USE SMALL FONTS FOR

→ **Luxury**. Luxury brands are appealing *because* they feel distant and unattainable. Interestingly, customers preferred luxury items when standing further away from them (Chu et al., 2021).

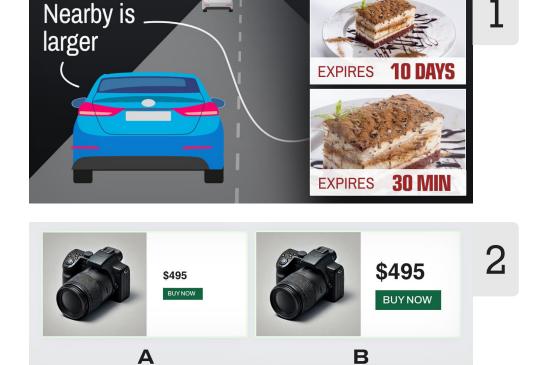
→ Price Sensitive Customers. Large fonts convey a good product, while small fonts convey a good deal (Aggarwal & Vaidyanathan, 2016)

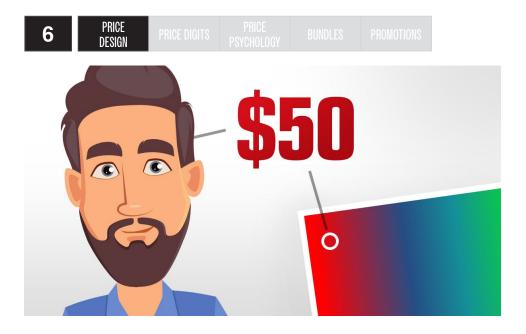
CAVEATS

→ More Research is Needed. Researchers confirmed that low numbers feel physically closer, while large numbers feel further away (Aleotti et al., 2020). But we still need to validate this effect with font sizes. In a pilot study, I found that respondents indicated they would buy a camera sooner if they saw a visually larger price and button. The difference was approaching significance, but not fully significant. Perhaps it's stronger with a more realistic purchase.

(see fig 2)

- Aggarwal, P., & Vaidyanathan, R. (2016). Is font size a big deal? A transaction-acquisition utility perspective on comparative price promotions. Journal of Consumer Marketing, 33(6), 408-416.
- Aleotti, S., Di Girolamo, F., Massaccesi, S., & Priftis, K. (2020). Numbers around Descartes: A preregistered study on the three-dimensional SNARC effect. Cognition, 195, 104111.
- Bhattacharyya, A., Jha, S., Guha, A., & Biswas, A. (2023). Should firms display the sale price using larger font?. Journal of Retailing, 99(1), 17-25.
- Chu, X. Y., Chang, C. T., & Lee, A. Y. (2021). Values created from far and near: Influence of spatial distance on brand evaluation. Journal of Marketing, 85(6), 162-175.
- Coulter, K. S., & Coulter, R. A. (2005). Size does matter: The effects of magnitude representation congruency on price perceptions and purchase likelihood. Journal of Consumer Psychology, 15(1), 64-76.
- Dehaene, S. (1992). Varieties of numerical abilities. Cognition, 44(1-2), 1-42.
- Ho, C. K., Kuan, K., Liang, S., & Ke, W. (2024). Effects of temporal features and product image zooming in online time scarcity deals: A construal fit account. Information & Management, 61(7), 104019.





DISPLAY RED PRICES TO MEN

Men make decisions quickly, and they assume that red indicates savings.

What color should prices be?

Typically red, like this area:

(see fig 1)

Try a semi-saturated red that looks vivid, yet natural.

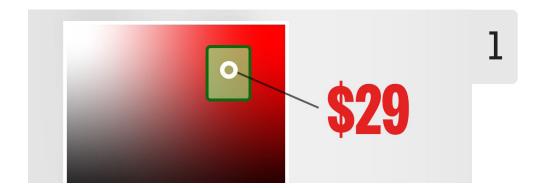
STRONGER FOR

→ **Men**. They assume that red indicates savings: "Men seem to process the ads less in-depth and use price color as a visual heuristic to judge perceived savings (Puccinelli et al., 2013, p. 121). But this effect has been replicated with females and different cultures (Kim & Jang, 2022; Van Droogenbroeck et al., 2018)

CAVEATS

→ **Savings Can't Be Too Low**. A red price worked for a 30% discount, but it decreased conversions for a 5% discount (Kim & Jang, 2022).

- → **All Prices Need to Be Red**. Changing a single price in your assortment could backfire (Ye et al., 2020).
- → **Not Too Saturated**. Saturated objects look bigger because attention is pulled toward them, and customers blame this heightened noticeability on size: *Well, it must be bigger* (Hagtvedt & Brasel, 2017).
- Hagtvedt, H., & Brasel, S. A. (2017). Color saturation increases perceived product size. Journal of Consumer Research, 44(2), 396-413.
- Puccinelli, N. M., Chandrashekaran, R., Grewal, D., & Suri, R. (2013). Are men seduced by red? The effect of red versus black prices on price perceptions. Journal of Retailing, 89(2), 115-125.
- Kim, H., & Jang, J. M. (2022). Disadvantages of red: The color congruence effect in comparative price advertising. Frontiers in Psychology, 13, 1019163.
- Van Droogenbroeck, E., Van Hove, L., & Cordemans, S. (2018). Do red prices also work online?: An extension of Puccinelli et al.(2013). Color Research & Application, 43(1), 110-113.
- Ye, H., Bhatt, S., Jeong, H., Zhang, J., & Suri, R. (2020). Red price? Red flag! Eye-tracking reveals how one red price can hurt a retailer. Psychology & Marketing, 37(7), 928-941.





REDUCE THE SIZE OF CURRENCY SYMBOLS

Smaller symbols are less painful and easier to distinguish from the digits in a price.

Do you need a currency symbol?

Probably. These symbols convey that a number is a price.

But in some contexts, removing these symbols can boost purchases. An upscale restaurant in NY boosted their average order value by removing currency symbols from their menu (Yang et al., 2009).

Example in a restaurant near me:

(see fig 1)

WHY IT WORKS

- → **Less Pain**. We're no longer spending cash. Plus, removing these symbols will reduce the amount of ink in your price—less ink, less pain (Coulter & Coulter, 2005).
- → **Better UX**. Currency symbols look like digits, forcing customers to disentangle them while compar-

ing prices. Even if you don't remove these symbols, you might need to adjust their size, color, or position so that customers can easily distinguish them from remaining digits. Example from Walmart:

(see fig 2)

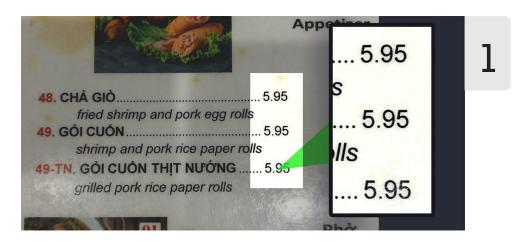
CAVEATS

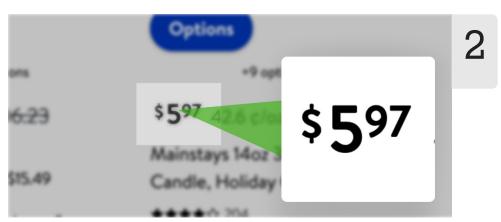
→ **Depends on Font**. Try fonts with greater distinction between digits and currency symbols, perhaps with more spacing or vertical slashes that extend fully through symbols. Here's \$50 in a few common fonts:

(see fig 3)

Coulter, K. S., & Coulter, R. A. (2005). Size does matter: The effects of magnitude representation congruency on price perceptions and purchase likelihood. Journal of Consumer Psychology, 15(1), 64-76.

Yang, S. S., Kimes, S. E., & Sessarego, M. M. (2009). Menu price presentation influences on consumer purchase behavior in restaurants. International Journal of Hospitality Management, 28(1), 157-160.









SORT PRICES FROM HIGH TO LOW

Initial prices become a baseline for comparison, so the subsequent prices seem cheaper.

How should you arrange products?

Over an 8-week span, researchers alternated the sequence of beer prices on a menu. Revenue was highest with high-to-low sorting (Suk et al., 2012).

(see fig 1)

WHY IT WORKS

→ **Higher Reference Price**. Customers who see a \$9 beer evaluate other beers against this price.

(see fig 2)

→ **Loss Aversion**. Customers who see a \$4 beer *then* \$5 beer are gradually losing the ability to pay a lower

price. They feel pressured to pounce on a cheaper beer while they're still cheap. But a *decreasing* sequence has the reverse effect: Customers who see a \$5 beer *then* \$4 beer are losing quality, so they pounce on a quality option.

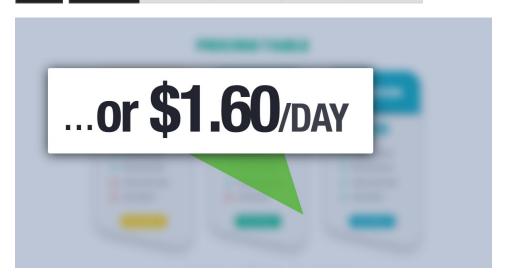
CAVEATS

→ **Left to Right**. Numbers get larger as they move from left to right, so high-to-low sorting in these horizontal layouts can feel disfluent or manipulative. Instead, try distinguishing a higher price (e.g., different color) so that customers view this expensive option first, thereby triggering the same effect.

Suk, K., Lee, J., Samp; Lichtenstein, D. R. (2012). The influence of price presentation order on consumer choice. Journal of Marketing Research, 49(5), 708-717.







REFRAME PRICES INTO SMALLER BASE VALUES

A lower absolute digit is persuasive.

Customers focus on absolute numbers.

They often prefer \$10/month to \$120/year because a smaller base value feels more pleasing.

But it works for any lower base value.

REFRAME A PRICE INTO:

- → **Monthly Price**. You'll often see yearly SaaS plans with a monthly framing (\$25/month billed annually).
- → **Daily Price**. Anything under \$4.00/day is persuasive (Gourville, 2003).
- → **Petty Expens**e. Like a cup of coffee (Gourville, 1999).
- → **Per User**. Describe your \$10k/month software as \$67/user per month.
- → **Lower Currency**. Global customers might be flexible on currency formats. If it makes sense, invoice them €4,600 instead of \$5,000 (Wertenbroch et al., 2007).
- → Incremental Cost. Consider a 23-inch TV for \$199. If you want to sell the 27-inch TV for \$259, don't sell the

total price of \$259. Sell the *difference* of \$60. Researchers confirmed this effect for a premium subscription to the New York Times (e.g., +\$7/month converted better than a total of \$16/month; Allard et al., 2019).

(see fig 1)

STRONGER FOR

- → **New Brands**. Products without existing pricing norms (Chung & Sheinin, 2024).
- → **Typical Frames**. Though let me know if you try \$0.00003 per second.
- → **Round Digits**. Customers preferred a gym membership in which €60/month was framed as €2/day or €15/week; they disliked €59/month as €1.99/day or €14.99/week (Bambauer-Sachse & Grewal, 2011).

Allard, T., Hardisty, D. J., & Griffin, D. (2019). When "more" seems like less: Differential price framing increases the choice share of higher-priced options. Journal of Marketing Research, 56(5), 826-841.

Bambauer-Sachse, S., & Grewal, D. (2011). Temporal reframing of prices: when is it beneficial?. Journal of Retailing, 87(2), 156-165.

- Bambauer-Sachse, S., & Mangold, S. C. (2009). Are temporally reframed prices really advantageous? A more detailed look at the processes triggered by temporally reframed prices. Journal of Retailing and Consumer Services, 16(6), 451-457.
- Basu, S., & Ng, S. (2021). 100amonthor 1,200 a year? Regulatory focus and the evaluation of temporally framed attributes. Journal of Consumer Psychology, 31(2), 301-318.
- Chung, M., & Sheinin, D. A. (2024). The effect of category- specific temporal frame on temporal reframing of price. Journal of Consumer Behaviour.
- Gourville, J. T. (1998). Pennies-a-day: The effect of temporal reframing on transaction evaluation. Journal of Consumer Research, 24(4), 395-408
- Gourville, J. T. (1999). The effect of implicit versus explicit comparisons on temporal pricing claims. Marketing Letters, 10(2), 113-124.
- Gourville, J. T. (2003). The effects of monetary magnitude and level of aggregation on the temporal framing of price. Marketing Letters, 14, 125-135.
- Wertenbroch, K., Soman, D., & Chattopadhyay, A. (2007). On the perceived value of money: The reference dependence of currency numerosity effects. Journal of Consumer Research, 34(1), 1-10.





ADD SPACE BETWEEN DISCOUNTED PRICES

A visual gap makes the numerical gap seem larger.

We imagine numbers along a horizontal ruler.

Therefore, add space between an original and sale price: Spatial distance feels like numerical distance (Coulter & Norberg, 2009).

Or add pseudo distance. Consider the *Mueller-Lyer illusion* in which a line seems longer when its edges are extended.

(see fig 1)

Digits can trigger this effect. For example, customers saw a greater distance between \$7 to \$5 when both digits faced outward (Coulter, 2007).

(see fig 2)

EXAMPLE: PARAGRAPH TEXT

While mentioning a discount, you could say: We're lowering our price from:

- → \$49 to \$35
- → **\$49** all the way to **\$35**

The second version might be more enticing.

EXAMPLE: PRICE SLIDERS

If you ask customers to enter their own price (e.g., donation, auction bid, bonus amount) in a slider, move the endpoint labels to the right of the slider, creating more distance between the current price and highest endpoint.

(see fig 3)

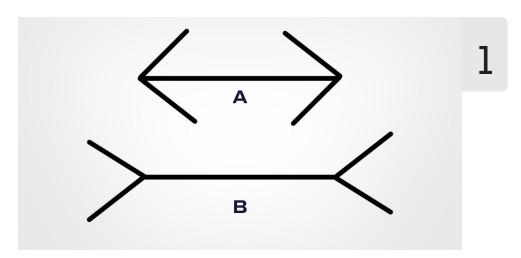
CAVEATS

- → **Not Too Wide**. Customers still need to group these two prices as a unit (DelVecchio et al., 2009).
- → **Must Be Horizontal**. This effect didn't manifest with vertical distance (Coulter & Norberg, 2009).

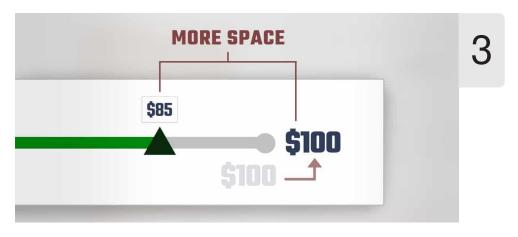
Coulter, K. S. (2007). The effects of digit- direction on eye movement bias and pricerounding behavior. Journal of Product & Brand Management, 16(7), 501-508.

Coulter, K. S., & Norberg, P. A. (2009). The effects of physical distance between regular and sale prices on numerical difference perceptions. Journal of Consumer Psychology, 19(2), 144-157.

DelVecchio, D., Lakshmanan, A., & Krishnan, H. S. (2009). The effects of discount location and frame on consumers' price estimates. Journal of Retailing, 85(3), 336-346.









SHRINK THE SPATIAL SIZE OF PAYMENT SECTIONS

Help customers imagine "getting more" while "paying less."

Space can distort meaning.

For example, a list of benefits in a pricing plan can seem smaller (and less appealing) with a lot of empty space (Kwan et al., 2017).

(see fig 1)

But what if smallness is desired? Like pricing?

For example, you typically see two sections on a product page:

- → What you get
- → What you pay

Try shrinking the spatial width of payment sections so that customers feel like they're "getting more" while "paying less."

Like Amazon pages:

(see fig 2)

After sharing this idea in my newsletter, I noticed that Walmart changed the layout of their product pages a few months later to apply this advice:

(see fig 3)

WHY IT WORKS

- → **Price Feels Smaller.** Something about the payment feels smaller, and customers blame the price.
- → **Checkout Seems Easier**. Same effect with the "amount" of effort in the next step.
- → Button Feel More Clickable Toward the Right. By shrinking the size of a payment section, you can push this interaction further toward the right side of the screen so that it feels more touchable and clickable for right-handers (who comprise most of the population). In a pilot study, I confirmed that right-handers prefer buttons on the right, while left-handers prefer buttons on the left.

HOW TO APPLY

- → Categorize Layouts By Costs and Benefits. In their old page, Walmart included details about the product inside the payment section. But now there's a clearer distinction between what you get vs. what you pay.
- → Shrink at Every Gestalt Level. Payment sections should consume less space in the layout, while prices

should consume less space within its section of the layout.

→ Don't Forget SaaS and Other Contexts. Perhaps you'll get more signups if your price consumes a smaller portion of height, leaving benefits to consume most of the space.

(see fig 4)













IMPLY DISCOUNTS WHEN POSSIBLE

Customers infer discounts from visual flair and just-below prices.

Discounts should look like discounts.

Try adding:

- → Signs
- → Banners
- → Colorful text
- → Exclamation Points

The mere existence of this visual flair can boost sales even if you're not running a promotion:

Occasionally we attach signs marked "Everyday Low Price" in front of two randomly selected brands in several product categories throughout our store, leaving their prices unchanged. Even though consumers should be accustomed to these signs and realize that the prices are unchanged, sales typically double for those brands that have the signs attached to their displays (interview with Jeff Thomas, a manager at H.E.B.; Inman et al., 1990).

That interview was 30+ years ago, but this strategy is still widely used.

Like these stickers in aisles at Home Depot:

(see fig 1)

WHY IT WORKS

- → Visual Flair = Discount. Some customers want a big discount. Others simply want any discount. These customers gravitate toward products with signs or banners because they are searching for discount cues (Inman et al., 1990).
- → **Discount** = **Energizing**. In one study, some participants saw a discount before viewing an optional video task. Unbeknownst to them, the video didn't exist; they just stared at an infinite loading spinner with a "skip" button. Participants who saw a discount were faster to click "skip" because they felt energized (Shaddy & Lee, 2020). Visual cues can intensify this burst of energy.

HOW TO APPLY

Embrace cues that are typical in discounts (e.g., stickers, colors, bold fonts) to imply the presence of a discount and energize customers.

Like this price tag at Target:

(see fig 2)

It has multiple factors that are known to boost energy:

- → Exclamation point (Yao & Scheepers, 2015)
- → Large font size (Bayer et al., 2012)
- → Red background (Crowley, 1993)

Why do those matter?

Customers will evaluate the discount by imagining a downward motion in price and judging the intensity of this reduction. Any slight burst of energy during this cognitive task could intensify the perceived strength of this downward adjustment, enlarging the size of the discount.

CAVEAT: USE JUST-BELOW PRICES IN LUXURY

Luxury brands might reduce prestige by giving actual discounts *and* visual flair. So what can you do?

Charge *just-below prices* (e.g., \$1595) so that you *imply* a discount without explicitly stating a discount. Among multiple prices for a luxury handbag — €1560, €1595, €1600, €1640 — customers preferred €1595 because

this price *felt* like a discount, helping them rationalize their guilt of buying (Fraccaro et al., 2021).

(see fig 3)

In another study, people evaluated laptops that were either \$599 or \$600. They preferred an emotional laptop when both laptops were \$599 because this price helped them rationalize it (Choi et al., 2014).

Most advice warns that luxury brands *shouldn't* charge just-below prices in order to maintain their prestige — though a large meta-analysis found that perceived quality isn't degraded like we originally believed (Troll et al., 2023). If you're still worried about losing prestige, simply reduce your price another notch (e.g., \$1580; Parguel et al., 2022).

- Bayer, M., Sommer, W., & Schacht, A. (2012). Font size matters—emotion and attention in cortical responses to written words. PloS one, 7(5), e36042.
- Crowley, A. E. (1993). The two-dimensional impact of color on shopping. Marketing letters, 4, 59-69.
- Gillespie, B., Manning, K. C., Ferrell, O. C., & Ferrell, L. (2023). Clearance vs. sale: promotion keywords and their implications for retailers and public policy. Journal of Marketing Theory and Practice, 31(4), 403-415.
- Inman, J. J., McAlister, L., & Hoyer, W. D. (1990). Promotion signal: proxy for a price cut?. Journal of consumer research, 17(1), 74-81.
- Kan, C., Liu, Y., Lichtenstein, D. R., & Janiszewski, C. (2023). The Negative and Positive Consequences of Placing Nonpromoted Products Next to Promoted Products. Journal of Marketing, 87(6), 928-948.
- Shaddy, F., & Lee, L. (2020). Price promotions cause impatience. Journal of Marketing Research, 57(1), 118-133.
- Troll, E. S., Frankenbach, J., Friese, M., & Loschelder, D. D (2023). A meta- analysis on the effects of just- below versus round prices. Journal of Consumer Psychology.









DISPLAY GOOD DEALS IN UGLY FONTS

Customers encode ugly discounts in greater detail.

Do you offer a sizable discount?

An ugly or unusual font can help customers notice it:

...the increased effort required to process disfluent price information can lead to deeper information processing. If the advertised price offer represents a good value, it can enhance purchase decisions, even if customers prefer the disfluent display less (Motyka et al., 2016, p. 627)

Across four weeks, researchers alternated the font — Helvetica or Bradley — for a 15% discount on Doritos at a convenience store in the US. Bradley was more difficult to read, yet this font increased conversions by 23 percent (Motyka et al., 2016).

Don't choose an ugly font, per se. Just slightly unusual (e.g., Lobster, Caveat, Bodoni)

(see fig 1)

WHY IT WORKS

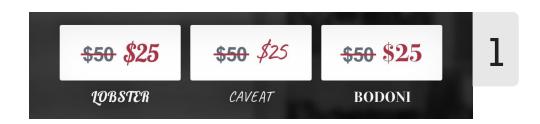
- → **Greater Attention**. Customers are forced to read and encode this information in more detail.
- → **Contrast = Difference**. When two things *look* different, they *feel* different: *Hmm, this discount feels different. Must be a great deal.*

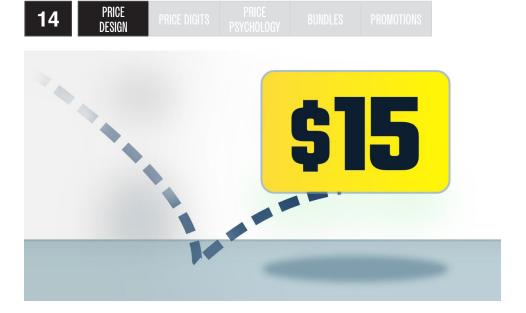
STRONGER FOR

- → **Round Fonts**. Angular fonts can intensify the pain of paying because they look physically sharp (though this effect only happened with eastern cultures; Park et al., 2022).
- → Existing Desire. Ugly discounts could feel negative for undecided customers: Hmm, do I want Doritos? This price doesn't feel right. Guess I don't want it. But an existing desire will change this mindset by intensifying their attention: Ah, Doritos. How much are they? *looks harder* Oh, great deal. Therefore, try ugly discounts for loyal customers, checkouts, rebates, or any late stage of funnels.

RELATED APPLICATIONS

- → Add Novelty to Discounts. A 40% discount was more appealing for US participants when it was framed as Pay 60% of the price. But this effect reversed for participants in Hong Kong, a location where this alternative framing was common. They preferred a novel discount of "Get 40% off" (Kim & Kramer, 2006).
- Kim, H. M., & Kramer, T. (2006). "Pay 80%" versus "get 20% off": The effect of novel discount presentation on consumers' deal perceptions. Marketing Letters, 17, 311-321.
- Motyka, S., Suri, R., Grewal, D., & Kohli, C. (2016). Disfluent vs. fluent price offers: Paradoxical role of processing disfluency. Journal of the Academy of Marketing Science, 44, 627-638.
- Park, J., Velasco, C., & Spence, C. (2022). "Looking sharp": Price typeface influences awareness of spending in mobile payment. Psychology & Marketing, 39(6),





ANIMATE PRICES WITH LIGHT PHYSICS

Speed and movement can influence perceived size.

Motion can activate a typical size.

Large objects move slow, while small objects move fast.

For example, participants watched a digital ad for an electronic speaker. The faster it moved? The smaller it seemed (Jia et al., 2020).

In a follow-up study, motion influenced their willingness to pay: Participants who wanted a portable device were willing to spend more if the device moved quickly.

"...when products (e.g., consumer electronics) are animated to vibrate, bounce, turn around, and spin spontaneously in videos, their overall movement patterns may look similar to various movements that insects or birds perform in the air, fish perform in the water, dancers perform on the stage... observing a product's movements can activate nodes about animate agents' movements and, consequently, the size-speed association in consumers' memories" (Jia et al., 2020, p. 102)

Maybe it impacts prices too.

What if you eased scrolling on a pricing page, moving prices upward with easy and effortless motion? Would they seem lighter and smaller?

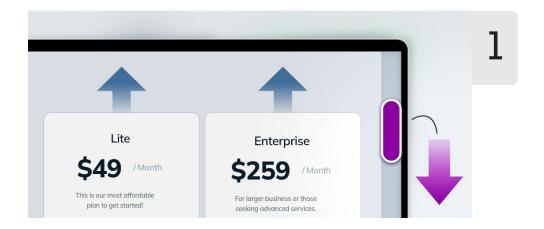
(see fig 1)

"Scrolljacking" can often hurt UX, but maybe there's a subtle approach, parallax effect, or other technique that could work.

CAVEATS

→ **Don't Animate the Price Itself**. Motion captures attention because it's unpredictably dangerous. While customers are debating their purchase, don't needlessly animate a price. Customers will focus on it, subconsciously inferring that it has more capacity to change.

Jia, H., Kim, B. K., & Ge, L. (2020). Speed up, size down: How animated movement speed in product videos influences size assessment and product evaluation. Journal of Marketing, 84(5), 100-116.





PLACE DISCOUNTS NEXT TO DISSIMILAR PRODUCTS

More customers buy the adjacent products if they don't compete.

Discounts capture attention.

And they push attention toward surrounding products.

(see fig 1)

Similar products seem worse compared to the discount, yet dissimilar products are less impacted because they don't compete. In fact, customers are *more* likely to buy these noncompeting products because their attention is now fixated in this area (Kan et al., 2023).

Imagine that you're discounting a regular yogurt.

Positioned toward the left? A competing yogurt on the right will seem worse compared to the discount:

(see fig 2)

However, a dissimilar greek yogurt would benefit on the right because (a) it doesn't compete with the discounted yogurt, and (b) the discount is pushing more attention toward it:

(see fig 3)

HOW TO APPLY

- → Insert New Brands Next to Discounts. Most customers won't seek a new product (e.g., oat milk), so you need to grab their attention by placing it next to a sale item (e.g., regular milk) to penetrate their consideration set.
- → Embrace Discounts From Noncompetitors. Even if street vendors aren't running a promotion, situating their cart next to a vendor that *is* running a promotion could boost sales due to heightened attention in this area. Especially if the food cuisines are different.

(see fig 4)

CAVEATS

→ **Don't Sacrifice Organization**. Help customers find products they're seeking.

Kan, C., Liu, Y. (Lucy), Lichtenstein, D. R., & Janiszewski, C. (2023). The Negative and Positive Consequences of Placing Nonpromoted Products Next to Promoted Products. Journal of Marketing, 0(0).













PLACE YOUR TARGET PLAN IN THE CENTER

Customers are more likely to choose a middle option because of the central gaze cascade effect.

What's the optimal location for a pricing plan?

Choices are guided by the *central gaze cascade effect* (Atalay et al., 2012).

Upon viewing options, your eyes immediately go to the center. But you still need to view the adjacent options, so you look left. Then right. During these eye movements, you cross over the central options multiple times.

Those fixations trigger a feedback loop:

- → More fixations? More liking.
- → More liking? More fixations.

Marketers could place their target plans in the middle of an assortment.

Or retailers could stock high ROI products on middle shelves (71% of shoppers choose from the middle two rows; Christenfeld, 1995).

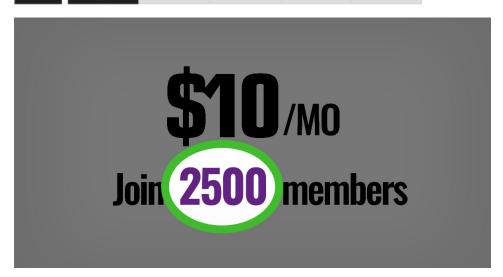
CAVEATS

→ **Aim to Be First or Last in a Sequence**. Do you show products individually? First positions are stickier in long-term memory, while final positions are stickier in working memory (see Miller & Campbell, 1959).

Atalay, A. S., Bodur, H. O., & Rasolofoarison, D. (2012). Shining in the center: Central gaze cascade effect on product choice. Journal of Consumer Research, 39(4), 848-866.

Christenfeld, N. (1995). Choices from identical options. Psychological Science, 6(1), 50-55.

Miller, N., & Campbell, D. T. (1959). Recency and primacy in persuasion as a function of the timing of speeches and measurements. The Journal of Abnormal and Social Psychology, 59(1), 1.



INSERT LARGE NUMBERS NEAR PRICES

Large numbers can make nearby prices feel smaller.

Customers evaluate prices by comparing them to other numbers.

For example, researchers sold CDs on a boardwalk, while a nearby vendor switched the price of their sweatshirt between \$10 and \$80 every 30 minutes.

When the sweatshirt was \$80, the CDs seemed cheaper. And customers bought more (Nunes & Boatwright, 2004).

Anchoring works with any number.

In another study, people reflected on the last two digits of their social security number. If these digits were high, they were willing to pay higher prices (Ariely et al., 2003).

(see fig 1)

Therefore, show any high numbers near your price:

- → Join 2,500 happy customers
- → Earn 5,000 reward points
- → Lasts for 10,000 hours

Anchoring is flexible. Customers will:

- → Shift decimals
- → Add or remove zeroes
- → Remove negative signs

Consider **099** and **1999**.

Which anchor is a better for a restaurant meal?

It depends:

- → 1999 was better near a single meal because it primed \$19.99
- → **099** was better near a *full bill* because it primed **\$99**

(see Koçaş & Dogerlioglu-Demir, 2020).

STRONGER FOR

→ **Separate Groups**. Add color or stylistic differences so that customers evaluate large numbers separately from the price. You need contrast (i.e., \$10 seems

smaller than 50), not assimilation (e.g., \$10 seems similar to 50).

IDEAS

→ Insert Large Bulk Quantities Before Prices. Customers prefer 70 items for \$29 (vs. \$29 for 70 items; Bagchi & Davis, 2012). Like this example from an app:

(see fig 2)

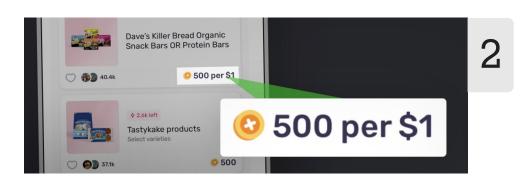
Adaval, R., & Monroe, K. B. (2002). Automatic construction and use of contextual information for product and price evaluations. Journal of Consumer Research, 28(4), 572-588.

- Ariely, D., Loewenstein, G., & Prelec, D. (2003). "Coherent arbitrariness": Stable demand curves without stable preferences. The Quarterly journal of economics, 118(1), 73-106.
- Bagchi, R., & Davis, D. F. (2012). 29for70itemsor70itemsfor 29? How presentation order affects package perceptions. Journal of Consumer Research, 39(1), 62-73.
- Dogerlioglu-Demir, K., & Koçaş, C. (2015). Seemingly incidental anchoring: the effect of incidental environmental anchors on consumers' willingness to pay. Marketing Letters, 26, 607-618.
- Coulter, K. S., & Coulter, R. A. (2005). Size does matter: The effects of magnitude representation congruency on price perceptions and purchase likelihood. Journal of Consumer Psychology, 15(1), 64-76.
- Koçaş, C., & Dogerlioglu-Demir, K. (2020). The 1 in 1,000,000: Context effects of how numbers cue different kinds of incidental environmental anchoring in marketing communications. Journal of Business Research, 109, 536-544.
- Nunes, J. C., & Boatwright, P. (2004). Incidental prices and their effect on willingness to pay. Journal of Marketing Research, 41(4), 457-466.

REFLECTING ON LARGE NUMBERS INCREASES WILLINGNESS TO PAY

ARIELY, D., LOEWENSTEIN, G., & PRELEC, D. (2003). "COHERENT ARBITRARINESS": STABLE DEMAND CURVES WITHOUT STABLE PREFERENCES. THE QUARTERLY JOURNAL OF ECONOMICS, 118(1), 73-106.

LAST SS DIGITS	WILLING TO PAY
00–19	\$16.09
20-39	\$26.82
40-59	\$29.27
60-79	\$34.55
80-99	\$55.64



PRICE DIGITS



REDUCE THE PHONETIC SIZE OF PRICES

Phonetic size feels like numerical size.

Prices can be spoken in different ways.

For example, \$167 could be spoken as:

- → One hundred and sixty seven dollars (10 syllables)
- → One sixty seven (5 syllables)

Fewer syllables can make a price feel smaller (Coulter et al., 2012).

In fact, every additional syllable decreases memory for a price by 20% across different languages (Vanhuele et al., 2006; Luna & Kim, 2009)

Therefore, try *shrinking* the phonetic size of your price:

...the auto salesperson might refer to his own brand's price in hundred-product terms, but the competitor's brand in thousand-sum terms (perhaps even including the exact cents amount to further increase magnitude perceptions; Coulter et al., 2012, p. 403)

COMMAS

Remove commas to reduce the phonetic size:

- → \$1,625: One thousand six hundred and twenty five (10 syllables)
- → \$1625: Sixteen twenty five (5 syllables)

(see fig 1)

Or try a decimal abbreviation:

- → \$1500: fifteen hundred dollars (6 syllables)
- \rightarrow \$1.5k: one point five kay (4 syllables)

CENTS

Should you remove cents from prices — like \$28.16 — in order to reduce the phonetic size? Not always. Cents can be effective because precise numbers feel smaller (Thomas et al., 2010).

So it depends on the medium:

- → Add cents in *written* prices to increase precision.
- → Remove cents in spoken prices to reduce the phonetic size.

PHONEMES

Certain sounds can feel smaller or larger. For example, vowels can be front or back based on the location of the tongue.

→ Front Vowels: bee, bit, bait → Back Vowels: boot, but, brought

These vowels are found in digits:

→ Front Vowels: 3, 5, 6, 7, 8, 9

→ **Back Vowels:** 1, 2, 4

In the sensory world, high-pitched sounds are produced by small objects. Thanks to this recurring experience, a price like \$35 feels smaller when spoken or heard because these phonemes produce a highpitched sound that activates the idea of a small object (Coulter & Coulter, 2010; Klink, 2000).

(see fig 2)

PARENTHESES

As you read this sentence, you're speaking these words inside your head because of inner speech.

Research shows that inner speech adapts to any vocal traits that are implied in writing (e.g., tone, accent, speed; Yao & Scheepers, 2015).

For example, if you see an exclamation point in a

purchase button, your brain will shout "Buy Now!" with an excited tone. But nobody feels genuinely excited during an ordinary purchase, so this syntax will likely reduce sales because something will feel wrong.

However, parentheses can trigger the opposite effect: Prices that are enclosed in parentheses will be internally spoken in quieter tones that imply less importance, size, or relevance. Try adding them whenever it makes sense (e.g., list of add-on prices).

(see fig 3)

STRONGER FOR

→ Auditory Cues. Even if customers read silently, their brain still encodes phonetic versions of prices. But this effect is stronger if customers speak these prices aloud or speak them in their mind.

Coulter, K. S., Choi, P., & Monroe, K. B. (2012). Comma N'cents in pricing: The effects of auditory representation encoding on price magnitude perceptions. Journal of Consumer Psychology, 22(3), 395-407.

Coulter, K. S., & Coulter, R. A. (2010). Small sounds, big deals: Phonetic symbolism effects in pricing. Journal of Consumer Research, 37(2), 315-328.

Dehaene, S. (1992). Varieties of numerical abilities. Cognition, 44(1-2), 1-42.

Klink, R. R. (2000). Creating brand names with meaning: The use of sound symbolism. Marketing letters, 11, 5-20.

Luna, D., & Kim, H. M. C. (2009). How much was your shopping basket? Working memory processes in total basket price estimation. Journal of Consumer Psychology, 19(3), 346-355.\

Thomas, M., Simon, D. H., & Kadiyali, V. (2010). The price precision effect: Evidence from laboratory and market data. Marketing Science, 29(1), 175-190.

Vanhuele, M., Laurent, G., & Dreze, X. (2006). Consumers' immediate memory for prices. Journal of Consumer Research, 33(2), 163-172.

Yao, B., & Scheepers, C. (2015). Inner voice experiences during processing of direct and indirect speech. Explicit and implicit prosody in sentence processing: Studies in honor of Janet Dean Fodor, 287-307.







INSERT ALLITERATION INTO PRICES

Customers were more likely to buy two t-shirts for \$25 because of the matching "t" sounds.

Alliteration feels good.

Consider the name Coca-Cola.

Reading Coca activates a "c" sound in our brain. Re-encountering this sound in Cola feels easy because of the existing activation of this sound, and we attribute this pleasant sensation to the entity (in this case, Coca-Cola).

You also see this strategy with pricing:

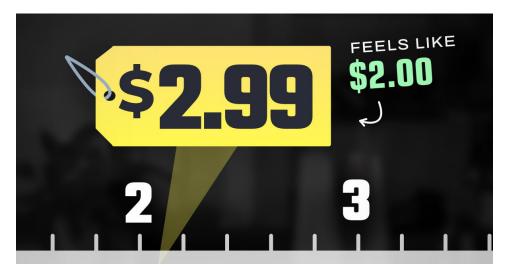
- → Five Dollar Footlong (Subway)
- → Four for \$4 (Wendy's)
- → **Ten for \$10** (Kroger)

Indeed, it works:

- → A \$6.00 sundae converted better than a \$5.99 sundae
- → Four Flavors \$4.00 converted better than Four Scoops \$3.99.
- → Two Twix converted better than Two Snickers.
- → 4 Fables \$40 converted better than 4 Threybles \$39.
- → 9 Neven for \$9.00 converted better than 9 Neven for \$8.00

(see Davis et al. 2016)

Davis, D. F., Bagchi, R., & Block, L. G. (2016). Alliteration alters: Phonetic overlap in promotional messages influences evaluations and choice. Journal of Retailing, 92(1), 1-12.



REDUCE THE LEFT DIGIT BY ONE

Use just-below prices (e.g., \$2.99, \$49.95) to reduce the left digit as much as possible.

Should you charge just-below prices, like \$9.99 or \$19.95?

These prices are everywhere. Sometimes even in calories (e.g., 199 calories; Choi et al., 2019).

Does this strategy really work?

It does, based on a meta-analysis with 40k participants (Troll et al., 2023).

A one-cent difference between \$2.99 and \$3.00 can feel like a one-dollar difference because your eyes get anchored on the 2:

...while evaluating "2.99," the magnitude encoding process starts as soon as our eyes encounter the digit "2." Consequently, the encoded magnitude of \$2.99 gets anchored on the leftmost digit (i.e., \$2) and becomes significantly lower than the encoded magnitude of \$3.00 (Thomas & Morwitz, 2005, p. 55).

WHY IT WORKS

- → \$2.99 = **Discount**. Just-below prices *feel* like a good deal (Gaston-Breton, 2011).
- → **Budget Tallies**. Researchers asked people to buy products under a \$73 budget. Participants believed they could buy significantly more items with just-below prices because they kept tallying the first digits instead of the rounded price (Bizer & Schindler, 2005).
- → Small Right Digits Are Falsely Rounded Up. Prices that end in 1 or 2 are incorrectly recalled as higher (Schindler & Chandrashekaran, 2004).

STRONGER FOR

- → **Small Left Digits**. \$199 is more effective than \$799 because the next threshold seems further away. Moving from 1 to 2 is a 100% increase, while moving from 7 to 8 is only a 14% increase; Lin & Wang, 2017).
- → **Visible Prices**. Customers need to see the anchor. Effects diminish if \$199 is heard or recalled (Sokolova et al., 2020).

- → **New Brands**. Without familiarity, customers assume that \$199 is discounted (Anderson & Simester, 2003).
- → Young and Affluent. Or anyone who is price-conscious and deciding quickly (Gaston-Breton, 2011).

CAVEATS

- → Multiple Price Tiers. \$29.99 and \$39.99 will push customers toward \$29.99, whereas \$30.00 and \$40.00 will retain customers at \$40.00 (Manning & Sprott,
- → Just Below Prices Aren't Actually Lower. Ironically, just below prices are typically higher than average — based on 8 years of scanner data and 98 million transactions; Snir & Levy, 2021).
- → Inferior Quality. You probably don't want to charge \$19,999 for a medical procedure. Though a large meta-analysis couldn't find any degradations in quality from just-below prices (Troll et al., 2023). Another study found that customers have gradually stopped using price to infer quality across the years from 1989 to 2006 (Völckner & Hofmann, 2007).
- → **Depends on Math Skills**. Customers who are skilled with numbers encode \$2.99 as \$3.00.
 - "...if the average WTP was determined to be around 18 dollars, less numerate consumers would respond most favorably to \$18.99, while highly numerate consumers would respond most favorably to \$17.99 (Hodges & Chen, 2022)

- Anderson, E. T., & Simester, D. I. (2003). Effects of \$9 price endings on retail sales: Evidence from field experiments. Quantitative marketing and Economics, 1, 93-110.
- Bizer, G. Y., & Schindler, R. M. (2005). Direct evidence of ending- digit drop- off in price information processing. Psychology & Marketing, 22(10), 771-783.
- Choi, J., Jessica Li, Y., & Samper, A. (2019). The influence of health motivation and calorie ending on preferences for indulgent foods. Journal of Consumer Research, 46(3), 606-619.
- Gaston-Breton, C. (2011). Consumer Preferences for 99-ending prices: the mediating role of price consciousness. In Business Economic Series (Vol. 3, pp. 1-39).
- Hodges, B. T., & Chen, H. (2022). In the eye of the beholder: The interplay of numeracy and fluency in consumer response to 99-Ending prices. Journal of Consumer Research, 48(6), 1050-1072.
- Lin, C. H., & Wang, J. W. (2017). Distortion of price discount perceptions through the left-digit effect. Marketing Letters, 28, 99-112.
- Manning, K. C., & Sprott, D. E. (2009). Price endings, left-digit effects, and choice. Journal of Consumer Research, 36(2), 328-335.
- Schindler, R. M., & Chandrashekaran, R. (2004). Influence of price endings on price recall: a by-digit analysis. Journal of Product & Brand Management, 13(7), 514-524.
- Schindler, R. M., & Kirby, P. N. (1997). Patterns of rightmost digits used in advertised prices: implications for nine-ending effects. Journal of Consumer Research, 24(2), 192-201.
- Snir, A., & Levy, D. (2021). If you think 9-ending prices are low, think again. Journal of the Association for Consumer Research, 6(1), 33-47.
- Sokolova, T., Seenivasan, S., & Thomas, M. (2020). The left-digit bias: when and why are consumers penny wise and pound foolish?. Journal of Marketing Research, 57(4), 771-788.
- Thomas, M., & Morwitz, V. (2005). Penny wise and pound foolish: the left-digit effect in price cognition. Journal of Consumer Research, 32(1), 54-64.
- Troll, E. S., Frankenbach, J., Friese, M., & Loschelder, D. D (2023). A meta- analysis on the effects of just- below versus round prices. Journal of Consumer Psychology.
- Völckner, F., & Hofmann, J. (2007). The price-perceived quality relationship: A meta-analytic review and assessment of its determinants. Marketing letters, 18.181-196.





REPEAT DIGITS TO GRAB ATTENTION

Similar items pull more attention.

Do you need to push attention toward your product?

Perhaps you need customers to look at *your* product in a 3rd party site (e.g., Amazon, eBay, Etsy).

In this scenario, try repeating digits in your prices (e.g., \$2111).

Humans group items that look similar:

(see fig 1)

It's called *gestalt similarity*. And it pulls attention.

Therefore, digit clusters grab more attention. In heatmap studies, repeated digits (e.g., 8999) receive

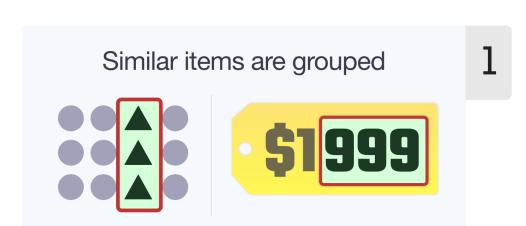
more attention than unique digits (e.g., 6875; Dogerlioglu-Demir et al., 2022).

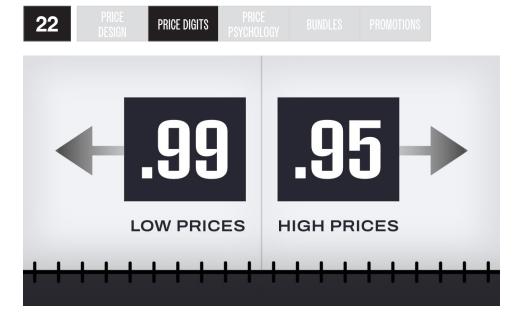
Repeat digits in prices, ratings, dates, SKUs, or any item that requires more attention.

STRONGER FOR

- → **High Competition**. Don't repeat digits on your own website. You want attention on benefits, not costs.
- → **Good Deals**. Try discounting \$4.44 to \$3.33. Your discount will be lower across every digit, and both clusters will grab more attention in a catalog or store aisle.

Dogerlioglu-Demir, K., Akpinar, E., Gurhan-Canli, Z., & Koçaş, C. (2022). Are 1-endings the new 9-endings? An alternative for generating price discount perceptions. Journal of Retailing and Consumer Services, 66, 102912.





CHARGE HIGH PRICES WITH 95-ENDINGS

\$49.99 feels better if this price is low, but \$49.95 feels better if it's considered high.

Should prices end with 99 or 95?

It depends on the base price. Customers preferred:

- \rightarrow \$3.99 and \$6.99 for cheap items (e.g., cheese, bug spray)
- → \$49.95 for expensive items (e.g., kettle)

(Gendall, 1998; Schindler, 2006).

Researchers are unsure why this happens, but I have a hunch. The size of the price doesn't matter. What matters is the *expected* price.

I confirmed this effect in a pilot study.

I asked people to imagine buying flip flops, and I adjusted the **expected** and **final** price. The interaction was significant:

- → \$18.99 was preferred when expecting \$25
- → \$18.95 was preferred when expecting \$12

WHY IT WORKS

Suppose that you expect to pay \$12 for flip flops.

Then you see \$18.95. How does it feel?

Well, you evaluate this price by starting at \$12, then traveling *upward*. Even though \$18.95 is higher than you expected, it stopped early. It *could* be higher.

But \$18.99 is pushed to the highest threshold in this bracket. So it feels more painful.

Conversely, an expected price of \$25 will result in downward motion. Now \$18.99 feels good because it pushed through a numerical boundary, while \$18.95 feels like it has wiggle room to move even lower.

For simplicity:

- → End in 99 for low prices
- → End in 95 for high prices

But ultimately, the choice between 99 vs. 95 depends

on the expected price and whether customers are traveling *upward* or *downward* to reach your actual price. Gendall, P. (1998). Estimating the effect of odd pricing. Journal of Product ϑ Brand Management, 7(5), 421-432.

Schindler, R. M. (2006). The 99 price ending as a signal of a low-price appeal. Journal of Retailing, 82(1), 71-77.



REDUCE DIGIT AVERAGES IN HIGH PRICES

The left-digit effect backfires for high prices (e.g., \$1999) because customers focus on the later digits.

You should typically reduce the left digit in a price.

\$5.99 feels lower than \$6.00 because your eyes are anchored to the left digit.

But \$5.99 has a couple 9's – which are high digits. Hmm, is that bad? Would it feel larger?

Interestingly, yes.

Usually this effect is trivial because the new left digit is more persuasive. Though it becomes important for prices in the thousands (e.g., \$1999; Lin & Wang, 2017).

Ironically, customers pay more attention to these later digits.

(see fig 1)

Researchers tested a variety of sale prices: \$3,111, \$3,222, \$3,333, \$3,444, \$3,555, \$3,666, \$3,777, \$3,888, and \$3999. For each price, they showed an original price that was \$895 more. Ultimately, sale prices with

low digits (e.g., 1, 2, 3, 4) converted better (Dogerlio-glu-Demir et al., 2022).

Therefore, switch your mindset in the thousands:

- → **Bad:** How can I reduce the left digit?
- → **Good:** How can I reduce the digit average?

Instead of choosing \$1999, try a low \$2000 price instead.

- \rightarrow The average of 1-9-9-9 is **7.0**.
- \rightarrow The average of 2-1-1-1 is **1.5**.

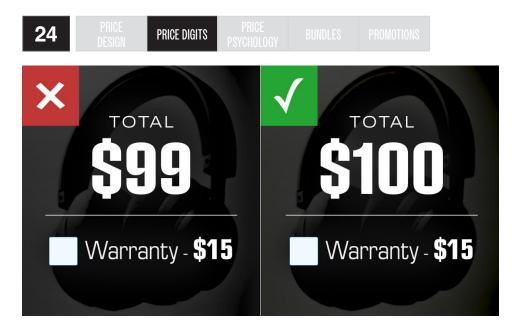
CAVEATS

 \rightarrow **Be Careful With 0**. We need more research to verify these effects.

Dogerlioglu-Demir, K., Akpinar, E., Gurhan-Canli, Z., & Koçaş, C. (2022). Are 1-endings the new 9-endings? An alternative for generating price discount perceptions. Journal of Retailing and Consumer Services, 66, 102912.

Lin, C. H., & Wang, J. W. (2017). Distortion of price discount perceptions through the left-digit effect. Marketing Letters, 28, 99-112.





SELL UPGRADES ABOVE ROUND THRESHOLDS

Spending money feels easier when prices surpass a round number.

Do you sell upgrades to a product?

A base price of \$20.05 is better than \$19.95 (Kim et al., 2022).

In a recent study, researchers sold coffee:

→ Small Coffee: \$0.95 → Large Coffee: \$1.20

Customers preferred the small coffee because it seemed like a better deal.

But then researchers added \$0.05 to each price:

→ Small Coffee: \$1.00 → Large Coffee: \$1.25

In this new assortment, customers preferred the large coffee. Even though the large coffee was still \$0.25 more expensive, it seemed like a better deal because both coffees were now priced above \$1.00.

Round numbers are thresholds that influence spending.

Suppose that you see a \$49.95 backpack.

Your budget was \$50, so great. You proceed to the checkout.

But hmm, the total (with tax) is now \$51.95.

It's only \$2 more, right? So you still plan to buy it.

However, look closely: You're now spending *above* \$50. If you notice a superior backpack for \$65, you might be tempted to buy this upgrade instead of the \$49.95 backpack.

Once you pass a round number, like \$50, new expenditures feel less painful.

That same effect could happen with:

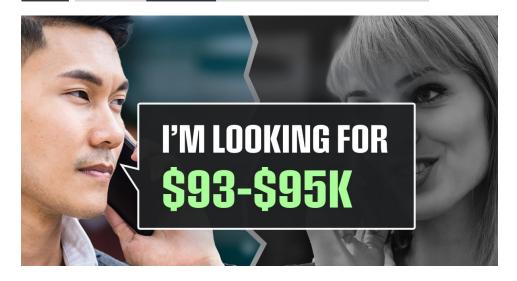
- → \$500 flight
- → \$5,000 deposit
- → \$50.000 car

HOW TO APPLY

- → Charge Round Prices With Add-Ons. More participants upgraded their car rental and hotel when these prices ended at a 200 Yuan and 300 Yuan (vs. 199 and 299; Li, 2024). If you sell a freelancing service on Fiverr or Upwork, a price of \$95 or \$99 might discourage customers from buying add-on services.
- → Keep Tallied Prices Below a Threshold. Perhaps you could sell a freelancing service for \$100 with 4 add-ons of \$95 each. Adding one service will increase the price from \$100 to \$195; both prices feel similar because they reside within the same numerical bracket.

Likewise, adding all 4 add-ons would increase the price from \$100 to \$480, so the total price remains below a major threshold of \$500. Indeed, upgrading from \$2002 to \$2999 felt easy in one study (Lee et al., 2024).

- Kim, J., Malkoc, S. A., & Goodman, J. K. (2022). The threshold-crossing effect: Just-below pricing discourages consumers to upgrade. Journal of Consumer Research, 48(6), 1096-1112.
- Lee, E., Kim, J., Shin, S., & Koo, C. (2024). Unlocking revenue: Psychological pricing effect for airlines' upselling strategies. International Journal of Hospitality Management, 119, 103720.
- Li, F. S. (2024). The influence of the base option's price format on tourists' upgrade intention: the moderating role of tourists' mindsets. Tourism Critiques: Practice and Theory, (ahead-of-print).



REQUEST A PRECISE RANGE OF PRICES

A high and precise range (e.g., \$93k to \$95k) earns the best deals in negotiations.

Negotiating on price?

Ask for a *range* of prices. Researchers compared requests for an \$80k salary:

→ Target at Top: \$70k - \$80k
→ Target in Middle: \$75 - \$85k
→ Target at Bottom: \$80k - \$90k
→ Single High Point: \$90k

Recipients earned the highest salary by placing their \$80k target at the bottom of the range (e.g., \$80k-\$90k; Ames & Mason, 2015).

But this range should be *precise*, like \$81k to \$93k.

Precise numbers activate a mental ruler with smaller increments:

...the resolution of this scale might also influence the amount of adjustment. X units of adjustment along a fine-resolution scale will cover less objective distance than the same number of units of adjustment

along a coarse-resolution scale (Janiszewski & Uy, 2008, p. 121)

In other words, an \$80k salary implies broad increments (e.g., \$75k, \$70k), whereas an \$81k salary implies narrow increments (e.g., \$79k, \$77k) that result in smaller jumps in any counteroffer.

STRONGER FOR

 \rightarrow Large Prices. A \$395,425 home feels cheaper than a \$395,000 home (Thomas et al., 2010).

WHY PRECISION

- → **Less Willing to Negotiate**. eBay sellers appear willing to negotiate when they charge multiples of \$100, which reduces their offer sizes by 5%–8% (Backus et al., 2015).
- → **Feels Smaller**. Small values (e.g., 1 or 2) are rarely rounded, so unrounded prices (e.g., \$81k) feel smaller because of this connotation (Thomas et al., 2010).

→ **Determined By Costs**. \$81k seems fairer (Peev & Mayer, 2017).

decimal notation, such as \$395.5k. This version is more precise (and linguistically shorter).

HOW TO APPLY

- → Include More Odd Digits. Odd digits feel more precise, so \$437 might feel smaller than \$428.
- → Abbreviate With a Decimal. What if your price has a few zeroes, like \$395,500? Try abbreviating with
- Ames, D. R., & Mason, M. F. (2015). Tandem anchoring: Informational and politeness effects of range offers in social exchange. Journal of personality and social psychology, 108(2), 254.
- Backus, M., Blake, T., & Tadelis, S. (2015). Cheap talk, round numbers, and the economics of negotiation (No. w21285). National Bureau of Economic Research.
- Janiszewski, C., & Uy, D. (2008). Precision of the anchor influences the amount of adjustment. Psychological Science, 19(2), 121-127.



TAILOR PRICES TOWARD NAMES OR BIRTHDAYS

Customers prefer prices that resemble themselves.

Customers prefer stimuli that resemble themselves.

For example, people named Dennis are more likely to become dentists (Pelham et al., 2002). And this effect has been replicated (Chatterjee et al., 2023).

In other words, Fred is more likely to:

- → Become a Firefighter
- → Reside in Fresno
- → Marry a Fiona

And...prefer prices with *four* or *five* (Coulter & Grewal, 2014).

For example, researchers sent cold emails to people from a university directory, asking them to participate in a study. They contacted people whose last names began with E or T (e.g., Edwards, Evans, Ellis, Thomas, Taylor, Turner).

These participants listened to a 15-20s commercial for a fake bicycle at \$622 or \$688.

- → T-names preferred **\$622** (six-twenty-two)
- → E-names preferred \$688 (six-eighty-eight)

And it happens in the real world too.

Based on 3 years of sales at a car dealership, researchers compiled all buyers whose first initial shared the first initial with a digit — in other words, buyer names that started with:

- → **0**: one
- → T: two, three, ten, twelve
- → **F**: four, five
- → S: six, seven
- → **E**: eight, eleven
- → N: nine

Customers preferred deals when more digits matched their name. Especially outside digits (e.g., \$45,891.54)

Birthdays trigger this effect too: Customers with a birthday on April 16 preferred \$39.16 (rather than \$39.11 or \$39.21; Coulter & Grewal, 2014).

CAVEATS

- → Large Purchases. You might need a big ticket purchase with price negotiability.
- → Auditory Prices. Customers might need to hear prices (e.g., from a salesperson, TV commercial, podcast). Though written prices still worked if customers spoke these prices inside their head (Coulter & Grewal, 2014).
- Brendl, C. M., Chattopadhyay, A., Pelham, B. W., & Carvallo, M. (2005). Name letter branding: Valence transfers when product specific needs are active. Journal of Consumer Research, 32(3), 405-415.

- Chatterjee, P., Mishra, H., & Mishra, A. (2023). Does the first letter of one's name affect life decisions? A natural language processing examination of nominative determinism. Journal of Personality and Social Psychology.
- Coulter, K. S., & Grewal, D. (2014). Name-letters and birthday-numbers: Implicit egotism effects in pricing. Journal of Marketing, 78(3), 102-120.
- Dobson, J., Gorman, L., & Moore, M. D. (2010). Consumer choice bias due to number symmetry: evidence from real estate prices. Journal of Research for Consumers, 17(1).
- Pelham, B. W., Carvallo, M., & Jones, J. T. (2005). Implicit egotism. Current Directions in Psychological Science, 14(2), 106-110.
- Pelham, B. W., Mirenberg, M. C., & Jones, J. T. (2002). Why Susie sells seashells by the seashore: implicit egotism and major life decisions. Journal of personality and social psychology, 82(4), 469.

3

PRICE PSYCHOLOGY



EASE COMPARISONS OF YOUR PRICE

Prices are compared to past prices, competitors, and adjacent numbers.

How do customers evaluate prices?

They use reference prices (see Mazumdar et al., 2005).

Imagine a carton of eggs for \$5.00.

Is \$5.00 a good deal? How can you tell? What happens in your brain?

You compare \$5.00 to a variety of numbers:

- → **Past Prices.** You paid \$4.50 last time.
- → Advertised Prices. A flyer said \$3.49.
- → **Estimated Prices.** You expected \$4.00.
- → **Competitor Prices.** Other eggs are \$2.99.
- → **Ideal Price**. You'd like to pay \$3.50.
- → **Maximum Price**: You won't pay more than \$5.50.
- → **Nearby Numbers.** You read 100% Organic.

And other numbers (see Lowengart, 2002)

You merge those sizes into a single magnitude, say \$4.00, then compare this magnitude to the base price of \$5.00.

Hmm, in this case, you'd need to pay more.

But that's okay. If this difference still feels reasonable, you'll buy the eggs and feel a slight twinge of pain that reduces your spending in the remaining shopping trip.

HOW TO APPLY

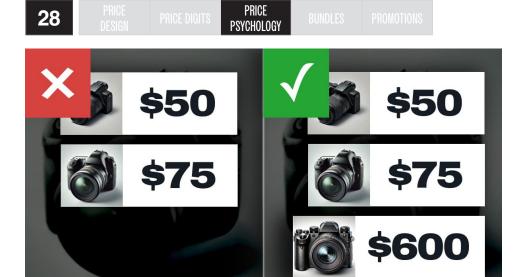
- → Compare Yearly Prices When You're Cheaper.
- Customers are biased toward absolute numbers: The relative difference between 5 and 9 feels smaller than 500 and 900 (Pandelaere et al., 2011). Therefore, don't compare your \$5/month plan to a \$9/month alternative. Compare the *yearly* differences at \$60/year and \$108/ year. The absolute difference is now \$48 instead \$4.
- → Compare All Your Prices to Competitors, or No **Prices**. Selective comparisons feel suspicious. Any price without a comparison is assumed to be higher (Barone et al., 2004).
- → Name Competitors in Comparisons. "Seen Elsewhere for \$50" feels suspicious (Krishnan et al., 2006).
- → Bundle When Competitors Are Cheaper. Prevent a direct comparison (Balachander et al., 2010).

→ Place Your Price Underneath Competitors.

You'll benefit either way: You'll ease subtraction when cheaper, yet hinder subtraction when more expensive (Guha et al., 2018).

- Balachander, S., Ghosh, B., & Stock, A. (2010). Why bundle discounts can be a profitable alternative to competing on price promotions. Marketing Science, 29(4), 624-638.
- Barone, M. J., Manning, K. C., & Miniard, P. W. (2004). Consumer response to retailers' use of partially comparative pricing. Journal of Marketing, 68(3), 37-47.
- Briesch, R. A., Krishnamurthi, L., Mazumdar, T., & Raj, S. P. (1997). A comparative analysis of reference price models. Journal of Consumer Research, 24(2), 202-214.

- Grewal, D., Marmorstein, H., & Sharma, A. (1996). Communicating price information through semantic cues: the moderating effects of situation and discount size. Journal of Consumer research, 23(2), 148-155.
- Grewal, D., Roggeveen, A. L., & Lindsey-Mullikin, J. (2014). The contingent effects of semantic price cues. Journal of Retailing, 90(2), 198-205.
- Krishnan, B. C., Biswas, A., & Netemeyer, R. G. (2006). Semantic cues in reference price advertisements: The moderating role of cue concreteness. Journal of Retailing, 82(2), 95-104.
- Lowengart, O. (2002). Reference price conceptualisations: An integrative framework of analysis. Journal of Marketing Management, 18(1-2), 145-171.
- Mazumdar, T., Raj, S. P., & Sinha, I. (2005). Reference price research: Review and propositions. Journal of marketing, 69(4), 84-102.
- Pandelaere, M., Briers, B., & Lembregts, C. (2011). How to make a 29% increase look bigger: The unit effect in option comparisons. Journal of Consumer Research, 38(2), 308-322.



ADD AN EXPENSIVE PRODUCT TO CATALOGS

Raise the highest pice in your range so that existing prices seem cheaper.

Every price is relative.

Customers evaluate the size of prices by comparing them to a visible range (Janiszewski & Lichtenstein, 1999).

For example, a \$10 gadget can be viewed differently:

- → Cheap in a range from \$8 to \$15
- → Meh in a range from \$5 to \$15
- → Expensive in a range from \$5 to \$12

Same price. Different perceptions.

(see fig 1)

Can't lower your price? Try raising the highest pice in your range.

Customers prefer:

- → A \$50 ribeye near a \$200 wine
- → A \$200 projector near a \$5,000 projector
- → A \$5,000 proposal near a \$25,000 proposal

In a catalog of 8 cameras from \$50—\$75, customers were willing to spend more when they saw a \$600 camera (Krishna et al., 2006).

REQUIREMENT: MULTIPLE PRODUCTS

Be careful if you sell variations of a single product (e.g., SaaS plans).

Customers engage in two types of processing:

- → **Discrimination** Evaluating the *differences* among objects
- → **Generalization** Evaluating a *summarized* view of objects

Oftentimes, a single product triggers *generalization*.

Why does that matter? Because it reverses the recommendation. Raising the highest pice would backfire for customers with a summarized view because the average price would now be higher (Cunha Jr & Shulman, 2011).

Adapt your approach based on this mindset:

- → Discrimination? Raise the *endpoints* of your prices (e.g., raise bottom, raise top)
- → Generalization? Lower the *mean* of your prices (e.g., lower bottom, add cheaper items).

HOW TO APPLY

- → **Delay Expensive Products for New Customers**. Existing customers should prefer a \$65 shirt near a \$300 shirt. But new customers will be assessing your *overall* store image upon their first exposure. In this summary mindset, a \$300 shirt would make all prices (including a \$65 shirt) seem more expensive.
- → Add a Small or Free SaaS Tier. Software is usually a single platform (thus a summary mindset). Try lowering the *mean* of your prices by adding a cheap plan so that *all* plans seem cheaper.
- → Raise the Upper Limit of Price Sliders. You might provide a UI slider for customers to choose their price (e.g., donation, bonus, auction bid). With a range from \$0 to \$1,000, the midpoint is \$500. But if you raise the

upper limit to \$2,000, the midpoint (and inferred social norm) is now \$1,000 (Thomas & Kyung, 2019).

RELATED APPLICATIONS

→ **Expand Ranked Lists**. Are you ranked #2 in your Top 5 competitors? Well, why not include 50 competitors? Or 100 competitors? You just moved from the top 40% to the top 2% without any effort (Xie et al., 2024).

Cunha Jr, M., & Shulman, J. D. (2011). Assimilation and contrast in price evaluations. Journal of Consumer Research, 37(5), 822-835.

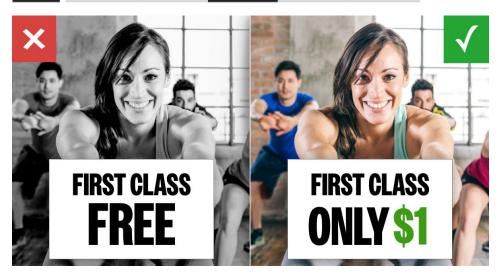
Janiszewski, C., & Lichtenstein, D. R. (1999). A range theory account of price perception. Journal of consumer Research, 25(4), 353-368.

Krishna, A., Wagner, M., Yoon, C., & Adaval, R. (2006). Effects of extreme-priced products on consumer reservation prices. Journal of Consumer Psychology, 16(2), 176-190.

Thomas, M., & Kyung, E. J. (2019). Slider scale or text box: how response format shapes responses. Journal of Consumer Research, 45(6), 1274-1293.

Xie, V., Cai, F., & Bagchi, R. (2024). EXPRESS: The Rank Length Effect. Journal of Marketing Research, 00222437241268439.





CHARGE A SMALL FEE FOR EFFORTFUL TRIALS

Free trials can orient people toward the behavioral costs of a product.

Should you give free trials?

Well, it depends.

Imagine that you sell complex software. Without a financial cost to try it, customers search for behavioral costs:

→ Hmm, free trial? Any reason not to try? Well, I'd need to learn how to use it.

In these scenarios, a small fee can convert higher because customers stay fixated on this low cost:

→ Hmm, only \$1? Sign me up.

For example, a large education company promoted their courses by discounting them between \$0 and \$10.

For local courses, a small fee converted better than \$0 (Fan et al., 2022).

Why? Because it distracted them from the effort of driving:

- → Hmm, free course? Any reason not to sign up? Well, driving would be annoying.
- → Hmm, only \$3? Sign me up.

For online courses, a free promotion converted better because customers had no behavioral costs to justify rejecting this promotion.

(see fig 1)

Similar effects happened with a new vaccine for hepatitis C: More people signed up for a clinical trial when they needed to pay \$0.73 (vs. free; Fan et al., 2022).

- → Hmm, free? Any reason why I shouldn't? Well, it might be risky.
- → Hmm, \$0.73. That's super cheap. Sign me up.

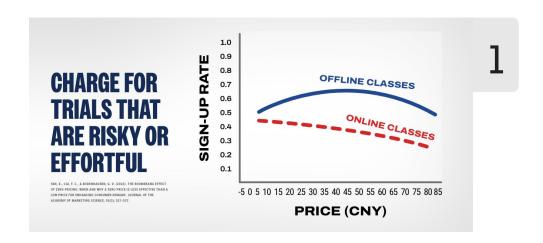
Ultimately, give free trials when products are easy to try. Otherwise charge a tiny fee to distract customers from the behavioral costs.

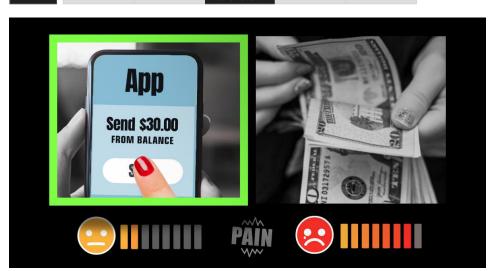
HOW TO APPLY

→ Align Promos With Effort Level. Consider a gym: Beginner classes could be a \$1 trial to distract newcomers from the effort of starting, while advanced classes could be a free trial to entice experts that don't feel behavioral costs.

Fan, X., Cai, F. C., & Bodenhausen, G. V. (2022). The boomerang effect of zero pricing: When and why a zero price is less effective than a low price for enhancing consumer demand. Journal of the Academy of Marketing Science, 50(3), 521-537.

Mao, W. (2016). Sometimes "fee" is better than "free": Token promotional pricing and consumer reactions to price promotion offering product upgrades. Journal of Retailing, 92(2), 173-184.





REQUEST PAYMENTS FROM PAINLESS METHODS

App payments feel less painful because these funds are separated from bank accounts.

Spending cash feels most painful.

Followed by:

- → Bank Accounts
- → Payment Apps
- → Credit Cards
- → Gift Cards

But it varies. Even within mediums.

For example, which app feels more painful: Venmo or Zelle?

Each differs in one aspect:

- → Venmo has a balance within the app
- → Zelle pulls directly from bank accounts

Venmo feels less painful because it's further removed from cash: It's app money, not real money (Pomerance & Reinholtz, 2024).

In fact, more products are sold in Facebook Market-

place when the poster requests Venmo (vs. Zelle; Pomerance & Reinholtz, 2024).

WHY IT WORKS

→ **Utility of Funds**. Cash can buy *anything*, while apps are limited to peer-to-peer transactions. Less utility? Less pain spending these funds. An \$80 textbook on Amazon felt less painful to buy with a book-only gift card (vs. anything card; Pomerance & Reinholtz, 2024).

HOW TO APPLY

- → Request Payments From Apps. Peer-to-peer transactions result in fairer outcomes for buyers and sellers because the social context encourages more cooperation (Huang & Savary, 2023).
- → Convert Cash to a Different Medium. Credits feel less painful to spend because of the limited utility of these funds.

(see fig 1)

→ Request Payments of Time. Time strengthens the bond between a customer and product — e.g., you feel closer to your phone after reflecting on how much time (vs. money) you've spent (Mogilner & Aaker, 2009). And it's easier to spend: People were twice as likely to stop by a lemonade stand (and pay twice as much) when they noticed a sign asking them to spend a little time (vs. money; Mogilner & Aaker, 2009). In ridesharing apps, users prefer Wait & Save to Priority Pickup (Trupia, & Shaddy, 2024).

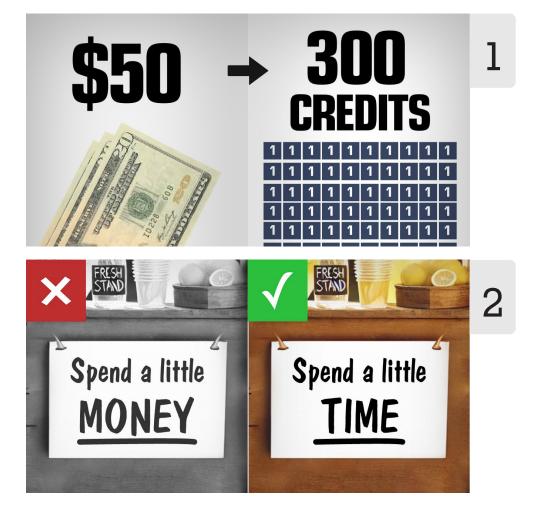
(see fig 2)

CAVEATS

→ Offer Painful Methods to Captive Customers.

Customers feel more attached to items when they pay in painful methods because of cognitive dissonance. For example, donors who pay by check become 10% more likely to donate in the future (Shah et al., 2016).

- Huang, L., & Savary, J. (2023). When Payments Go Social: The use of Person-to-Person payment methods attenuates the endowment effect. Journal of Marketing Research, 60(3), 585-601.
- Mogilner, C., & Aaker, J. (2009). "The time vs. money effect": Shifting product attitudes and decisions through personal connection. Journal of Consumer Research, 36(2), 277-291.
- Park, J., Lee, C., & Thomas, M. (2021). Why do cashless payments increase unhealthy consumption? The decision-risk inattention hypothesis. Journal of the Association for Consumer Research, 6(1), 21-32.
- Pomerance, J., & Reinholtz, N. (2024). Cut me some slack! How perceptions of financial slack influence pain of payment. Psychology & Marketing.
- Shah, A. M., Eisenkraft, N., Bettman, J. R., & Chartrand, T. L. (2016). "Paper or plastic?": How we pay influences post-transaction connection. Journal of Consumer Research, 42(5), 688-708.\
- Thomas, M., Desai, K. K., & Seenivasan, S. (2011). How credit card payments increase unhealthy food purchases: Visceral regulation of vices. Journal of consumer research, 38(1), 126-139.
- Trupia, M. G., & Shaddy, F. (2024). "No time to buy": Asking consumers to spend time to save money is perceived as fairer than asking them to spend money to save time. Journal of Consumer Psychology, 00, 1–13.





OFFER A SIMILAR (YET WORSE) PRODUCT

Existing products feel more appealing with a "decoy option" nearby.

Should you offer a decoy product?

Consider these subscriptions to *The Economist* magazine:

- → **\$59** Digital
- → **\$125** Print
- → \$125 Print and Digital

At first glance, they seem wrong. *Print only* has the same price as *Print and Digital*.

But alas, print only is a decoy option.

Nobody chooses this subscription, but it boosts demand for the more expensive *Print and Digital* subscription (Ariely, 2008).

WHY IT WORKS

Adjacent options are comparison points (Rooderkerk et al., 2011).

- → **Compromise Effects**. Customers prefer the middle of two extremes.
- → **Attraction Effects**. Customers prefer similar, yet superior options.

(see fig 1)

(see fig 2)

Adjust your assortment to trigger these effects.

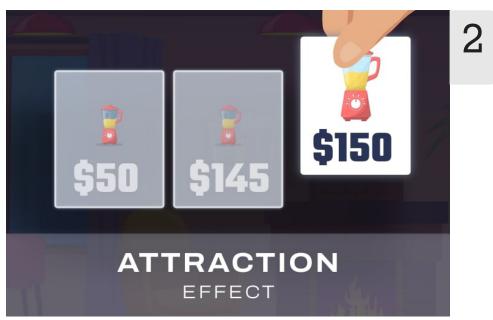
HOW TO APPLY

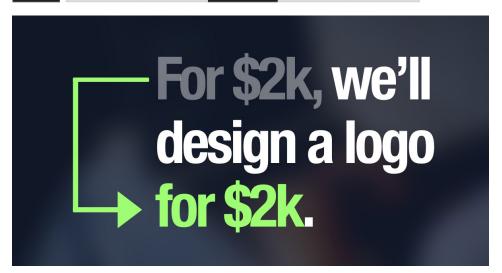
- → **Show Inferior Options**. A real estate agent could help their client see the value of a \$700k home by showing a \$600k home that needs a lot of repairs.
- → Add Decoys to Middle Tiers. Consider a \$700 and \$1k smartphone. Add a \$900 phone that resembles the \$700 model so that you enhance both models (\$700 and \$1k).

Ariely, D., & Jones, S. (2008). Predictably irrational. New York: HarperCollins.

Rooderkerk, R. P., Van Heerde, H. J., & Bijmolt, T. H. (2011). Incorporating context effects into a choice model. Journal of Marketing Research, 48(4), 767-780.







DESCRIBE YOUR PRODUCT BEFORE THE PRICE

Emphasize the benefits. Not costs.

Which should you show first: product or price?

It depends. Each sequence actives a different mindset:

- → **Product Then Price:** Customers fixate on benefits.
- → **Price Then Product:** Customers fixate on economic value.

Therefore:

- → **Selling high quality?** Describe products before prices. Based on brain scans, customers fixate on benefits, which cushions their first exposure to the price (Karmarkar et al., 2015).
- → **Selling low cost?** Show prices first. Customers will fixate on this price while evaluating the product, which helps them see the economic value.

Still not sure? In default scenarios, describe benefits then prices.

Skilled negotiators frame offers as gains (Majer et al., 2020).

- → **Gain**: I give my A for your B.
- → Loss: I request your B for my A.

Same with pricing:

- → Gain: I give a logo for \$2k.
- → **Loss**: I request \$2k to give a logo.

Customers in the second frame evaluate the offer by fixating on their loss of \$2k.

Karmarkar, U. R., Shiv, B., & Knutson, B. (2015). Cost conscious? The neural and behavioral impact of price primacy on decision making. Journal of Marketing Research, 52(4), 467-481.

Majer, J. M., Trötschel, R., Galinsky, A. D., & Loschelder, D. (2020). Open to offers, but resisting requests: How the framing of anchors affects motivation and negotiated outcomes. Journal of personality and social psychology, 119(3), 582.

4

BUNDLES





CHARGE DIVISIBLE PRICES IN BULK BUNDLES

Customers imagine each item as a discrete unit.

Consider a 3-pack of candles for \$15.

Each candle would cost \$5. Pretty good, right?

If you lower the bundle price to \$14.50, now each candle would cost \$4.83. But ironically, this cheaper price is less appealing because it lacks divisibility.

Customers preferred:

- → 4-pack of body wash for \$16 (vs. \$15.30)
- → 6-pack of tissues for \$18 (vs. \$17)
- → 8-pack of toothbrushes for \$16 (vs. \$15.41)
- → 11-pack of cashews for \$11 (vs. \$10)

(see Park et al., 2023).

WHY IT WORKS

→ Easier to Imagine Usage. In a 3-pack of candles for \$15, customers can easily calculate \$5 per candle. This calculation shifts their attention from the bundle to the units. Customers imagine the candles as discrete items, easing their ability to imagine usage scenarios (e.g., one for the living room, one for the bathroom, one for the bedroom).

(see fig 1)

HOW TO APPLY

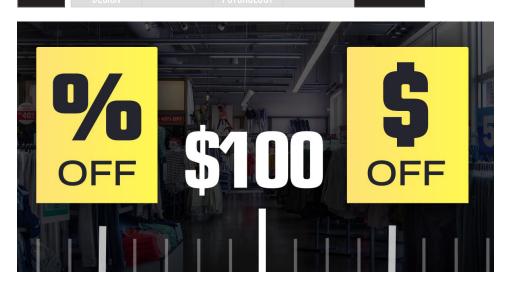
- → Adjust Prices or Quantities. Whichever can help vou reach divisibility.
- → Multiples Can Work Too. Like 4 small pizzas with 6 toppings for \$24 (King, & Janiszewski, 2011).
- → Charm Prices Might Work Too. Instead of \$15.00, try \$14.99. Customers might round up to \$15 for divisibility, yet \$14 would anchor a lower price for the bundle.

Park, H., Kwon, J., & Bagchi, R. (2023). Is '4 for 16' Better Than'4 for 15.30'? The Price Divisibility Effect in Multipack Purchases. Journal of Consumer Research, ucad071.

King, D., & Janiszewski, C. (2011). The sources and consequences of the fluent processing of numbers. Journal of Marketing Research, 48(2), 327-341.



PROMOTIONS



DISCOUNT HIGH PRICES BY AMOUNT OFF

Choose whichever framing — percent or amount — is a higher absolute digit.

Should you discount by percentage or amount?

It depends. Customers prefer whichever digit is higher:

...a \$1,000 discount on a \$20,000 automobile appears significant in terms of dollar savings, but the equivalent 5% discount seems less attractive. On the other hand, a 50% price reduction on a \$0.50 can of cola appears attractive in terms of percentage amounts, but the real monetary savings of \$0.25 does not appear to be significant (Chen et al., 1998, p. 356)

(see also González et al., 2016)

Use \$100 as a baseline:

- → **Under \$100?** Discount by *percent*.
- → **Over \$100?** Discount by *amount*.

In both cases, you'll show the higher digit:

- → \$50 blender: 20% off seems better than \$10 off
- → \$150 blender: 20% seems worse than \$30 off

CAVEATS: DISCOUNT BY AMOUNT FOR

- → **Everyday Items**. Grocery prices are highly accessible, so customers rely on absolute differences (Yan, 2019).
- → **Low Power Customers**. They're skeptical of percentages (Choi & Mattila, 2014).

CAVEATS: DISCOUNT BY PERCENT FOR

→ **Very High Prices**. \$500 off can remind customers that they are spending a lot of money.

Chen, S. F. S., Monroe, K. B., & Lou, Y. C. (1998). The effects of framing price promotion messages on consumers' perceptions and purchase intentions. Journal of retailing, 74(3), 353-372.

Choi, C., & S. Mattila, A. (2014). The effects of promotion framing on consumers' price perceptions: The moderating role of a personal sense of power. Journal of Service Management, 25(1), 149-160.

- DelVecchio, D., Krishnan, H. S., & Smith, D. C. (2007). Cents or percent? The effects of promotion framing on price expectations and choice. Journal of marketing, 71(3), 158-170.
- González, E. M., Esteva, E., Roggeveen, A. L., & Grewal, D. (2016). Amount off versus percentage off-when does it matter?. Journal of Business Research, 69(3), 1022-1027.
- Guha, A., Biswas, A., Grewal, D., Verma, S., Banerjee, S., & Nordfält, J. (2018). Reframing the discount as a comparison against the sale price: does it make the discount more attractive?. Journal of Marketing Research, 55(3), 339-351.
- Kim, H. M., & Kramer, T. (2006). "Pay 80%" versus "get 20% off": The effect of novel discount presentation on consumers' deal perceptions. Marketing Letters, 17, 311-321.
- Yan, D. (2019). Subtraction or division: Evaluability moderates reliance on absolute differences versus relative differences in numerical comparisons. Journal of Consumer Research, 45(5), 1103-1116.

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SEPARATE YOUR DISCOUNTS WHEN POSSIBLE

All else equal, customers prefer coupons to visibly reduced prices.

Consider a \$10 discount.

Marketers could show a discounted price:

(see fig 1)

Or they could supply coupons. In this case, customers would see current prices until they apply this discount in the checkout:

(see fig 2)

Would it matter? It's still a \$10 discount either way.

Turns out, yes. Coupons induce larger purchases (Jia et al., 2023).

With a coupon, customers browse products by fixating on the price reduction — rather than the final price — and this pleasant sensation numbs the pain of a larger

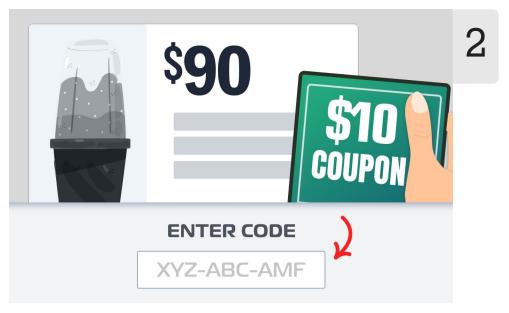
purchase. For discounts that are visibly shown, prices are already reduced without any wiggle room to reduce further. So customers prefer cheaper options.

HOW TO APPLY

- → **Give Coupon.** All else equal, they're superior to visible discounts.
- → **Delay Showing Discounted Prices.** Consider a 15% discount. Marketers will be tempted to apply this discount immediately in order to show the lowest price possible. But if customers are aware of this discount while browsing, wait until the checkout to show the final reduction. Let customers envision price flexibility while browsing.

Jia, H., Huang, Y., Zhang, Q., Shi, Z., & Zhang, K. (2023). Final Price Neglect in Multi-Product Promotions: How Non-Integrated Price Reductions Promote Higher-Priced Products. Journal of Consumer Research, ucad045.







GIVE ROUND OR PRECISE DISCOUNTS

Round percentages seem big, while decimal percentages seem urgent.

Which discount is better: 24.7% or 25%?

It depends.

Round numbers can feel larger: A drink was more energizing with 100mg of caffeine (vs. 102mg; Pena-Marin & Bhargave, 2016; Thomas et al., 2010).

However, precise numbers feel less stable. You imagine 24.7 on narrow scale in which any movement — even a slight nudge — can change this number.

(see fig 1)

Subconsciously, 24.7% can easily change. Perhaps even disappear. Therefore, customers feel motivated to grab this discount while it's still available. Indeed, customers were motivated by a 6.8% (vs. 7%) discount

because they believed it would end sooner (Jha et al., 2023).

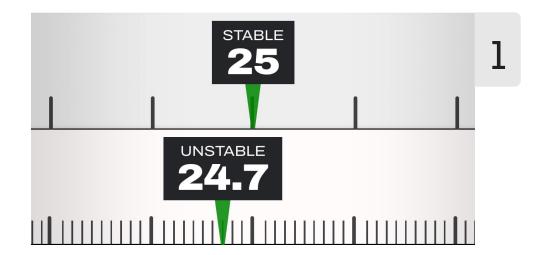
HOW TO APPLY

- → **Commit to One Side**. Your discount should be 7.7% or 10%. Not 8%.
- → **Adjust Discounts for Segments**. Are customers motivated by price? Give 25% off. Urgency? Give 24.7% off.
- → Add Decimals to Long-Term Discounts. 16.2% off can *imply* urgency even if there's no deadline.

Pena-Marin, J., & Bhargave, R. (2016). Lasting performance: Round numbers activate associations of stability and increase perceived length of product benefits. Journal of Consumer Psychology, 26(3), 410-416.

Thomas, M., Simon, D. H., & Kadiyali, V. (2010). The price precision effect: Evidence from laboratory and market data. Marketing Science, 29(1), 175-190.

Jha, S., Biswas, A., Guha, A., & Gauri, D. (2023) Can rounding up price discounts reduce sales?. Journal of Consumer Psychology.





LET CUSTOMERS WIN THEIR DISCOUNT

Gamified discounts are consistently effective.

Should you gamify discounts?

Jordan's Furniture is a retailer near Boston, and occasionally they give away furniture for free depending on certain outcomes:

Buy anything ... ANYTHING ... at Jordan's Furniture starting today and it could all be FREE if the Red Sox pitch a perfect game between July 19 and September 29 (Reidy, 2013)

Other gamified outcomes:

- → Sports team remains undefeated
- → Certain movie wins an Oscar
- → Every 50th purchase

Do these promotions work? Indeed they do.

For example, a grocery store in the US tested two promotions:

- → 1% off
- → 1% chance it's free

Both discounts were equal, yet customers spent 54% more with the gamified discount (Lee et al., 2019).

And it's been replicated. Many times.

Researchers bought a vending machine that sold \$0.75 candies (e.g., Snickers, Twix, Starburst).

They ran two discounts:

- → Pay \$0.50 instead of \$0.75
- → Pay \$0.75, but a 33% chance to get it free

The uncertain discount boosted sales by 50% (Mazar et al., 2017).

Customers also spent more on digital courses:

- → Pay \$15 for any course
- → Choose one of three doors (all showed \$15 off)

And fast food:

- → Pay 1.50€ instead of 2€
- → 50% chance to pay 1€ instead of 2€

(see Alavi et al., 2015; Hock et al., 2020).

In fact, you can even *lower* the discount.

Participants received a scratch ticket with a discount for 0%, 10%, 20%, or 30% off.

The top performers? Any discount that was won.

A lucky 10% discount sold more merchandise than a guaranteed 20% discount (Hock et al., 2020).

(see fig 1)

STRONGER FOR

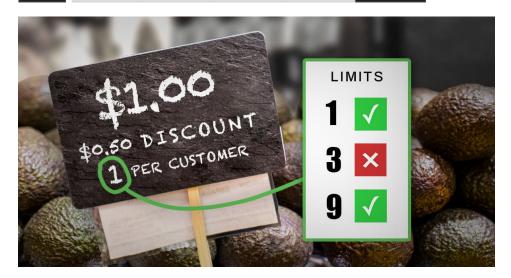
→ Price-Sensitive Customers. But gamified discounts can still work for expensive products (e.g., hotel rooms; Choi & Kim, 2007; Mazar et al., 2017).

RELATED APPLICATIONS

→ Randomize Which Products to Discount. Participants were 67% more likely to click a link to buy caramel chocolate on Amazon when this flavor was chosen to be discounted by a random number generator (Fulmer & Reich, 2024).

- Alavi, S., Bornemann, T., & Wieseke, J. (2015). Gambled price discounts: a remedy to the negative side effects of regular price discounts. Journal of Marketing, 79(2), 62-78.
- Choi, S., & Kim, M. (2007). The effectiveness of "scratch and save" promotions: The moderating roles of price consciousness and expected savings. Journal of Product & Brand Management, 16(7), 469-480.
- Fulmer, A. G., & Reich, T. (2024) Promoting a product without increasing the promotion budget: How chance in promotions can heighten consumer demand. Journal of Consumer Psychology.
- Hock, S. J., Bagchi, R., & Anderson, T. M. (2020). Promotional games increase consumer conversion rates and spending. Journal of Consumer Research, 47(1), 79-99.
- Lee, C. Y., Morewedge, C. K., Hochman, G., & Ariely, D. (2019). Small probabilistic discounts stimulate spending: Pain of paying in price promotions. Journal of the Association for Consumer Research, 4(2), 160-171.
- Mazar, N., Shampanier, K., & Ariely, D. (2017). When retailing and Las Vegas meet: Probabilistic free price promotions. Management Science, 63(1), 250-266.
- Reidy, C. (2013, April 3). Pedro Martinez pitches perfect game promotion for Jordan's Furniture. Boston.com. https://www.boston.com/uncategorized/noprimarytagmatch/2013/04/03/pedro-martinez-pitches-perfect-game-promotion-for-jordans-furniture





LIMIT BULK DISCOUNTS BY SMALL OR LARGE AMOUNTS

Mid-sized amounts pull customers to the lower end of their purchase range.

Some items are bought in bulk (e.g., fruits, soap, vitamins).

Maybe a customer plans to buy 5 peaches. But they'll accept 3–7 peaches.

Now, imagine a \$0.50 discount.

Retailers could limit this discount:

- → Limit of 1 peach
- → Limit of 3 peaches
- → Limit of 9 peaches

Would these matter?

Yes. Turns out, moderate limits (e.g., 3 peaches) reduce sales because they anchor people to the lower end of their acceptable range.

(see fig 1)

Customers buy 3 peaches instead of 5 peaches like they planned.

...if the grocery store allows him to buy six muffins at a discount, he will buy six. But, if the store allows him to buy only five muffins at a discount, he may buy just five (Zhang et al., 2021, p. 774)

If a bulk discount is limited to 1 peach, customers still buy 4 more peaches at the regular price to reach their planned quantity of 5.

Researchers confirmed this effect in a real fruit shop: A limit of 3 sold the fewest peaches (Zhang et al., 2021).

(see fig 2)

Unsure which limit to impose? Try a high limit.

In another study, high limits (e.g., 8 for \$8) performed better than low limits (e.g., 2 for \$2, 4 for \$4) because they anchored purchases upward (Manning, & Sprott, 2007).

CAVEATS

- → Use Restrictions, Not Requirements. A 'limit of 2" increases conversions, but "must buy 2" reduces conversions (Inman et al., 1997; Bhatt et al., 2024).
- Bhatt, S., Swaminathan, S., & Suri, R. (2024). Restrictively framed promotions hurt retailers: The role of promotion induced reactance. Journal of Promotion Management, 30(1), 77-109.

- Inman, J. J., Peter, A. C., & Raghubir, P. (1997). Framing the deal: The role of restrictions in accentuating deal value. Journal of Consumer research, 24(1), 68-79.
- Manning, K. C., & Sprott, D. E. (2007). Multiple unit price promotions and their effects on quantity purchase intentions. Journal of Retailing, 83(4), 411-421.
- Wansink, B., Kent, R. J., & Hoch, S. J. (1998). An anchoring and adjustment model of purchase quantity decisions. Journal of Marketing Research, 35(1), 71-81.
- Zhang, S., Sussman, A. B., & Hsee, C. K. (2021). A dragging-down Effect: Consumer decisions in response to price increases. Journal of Consumer Research, 47(5), 772-786.





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