

Nonprototypical packaging and strategic implications: When structural design disrupts or delivers

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Abstract

*In a saturated consumer packaged goods market, nonprototypical (NP) or 'chaos' packaging has become a way for challenger brands to attract attention and differentiate. Yet little is known about how structural atypicality interacts with category norms and consumer expectations to shape perceptions of safety, quality, trust and brand fit. Drawing on cue utilisation theory, typicality research and sensation transference, this study examines the double-edged nature of packaging disruption. A split-cell survey in Argentina, the UK and the USA (n = 600) compared reactions to typical versus NP formats across four product categories. Findings show that while atypical packaging boosts visual salience, it often lowers trust and product perceptions, except in categories with long-standing, stagnant norms. The paper offers theoretical and managerial guidance on when packaging disruption is likely to support—or undermine—consumer inference and purchase interest. This article is also included in **The Business & Management Collection** which can be accessed at <https://hstalks.com/business/>.*

Keywords

atypical packaging, category dynamics, challenger brand, chaos packaging, nonprototypical packaging, unconventional packaging

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INTRODUCTION

The COVID-19 pandemic spurred a wave of entrepreneurial activity in the food and beverage sector, leading to a surge in new consumer packaged goods (CPG) brands¹. As competition intensified — especially in physical retail — emerging brands increasingly turned to nonprototypical (NP) packaging: structural formats that deviate from category norms. Often referred to as chaos packaging^{2,3}, this approach repurposes shapes from unrelated categories — for example, water in

aluminium beer cans or cartons, olive oil in squeezable condiment bottles, sunblock in metallic spray canisters or spirits in containers resembling paint thinner (see Figure 1). These designs aim less at functionality than at provoking attention and carving out visual space on crowded shelves, raising questions about how consumers interpret such anomalies during fast, low-involvement decisions. Although atypical packaging is not new (eg. L'eggs' egg-shaped containers in the 1970s or Go-Gurt's tubes in the 1990s)^{4,5}, today's rapid rise in radical structural

divergence has outpaced theoretical understanding of its effects. Prior research shows that visual novelty captures attention and may spark curiosity^{6,7,8}. Yet theories of typicality, cue congruency and sensation transference suggest that breaking expected cue–product associations can impair perceptions of taste, trust and usability.

This study examines these trade-offs by testing how NP structures influence consumer inferences about product quality, safety and brand fit across multiple product categories and cultural contexts. Drawing on cue utilisation theory and sensation transference, it proposes that structural deviations act as high-impact extrinsic cues, especially in categories where heuristic processing dominates at point of sale. The study further considers whether the effects of structural novelty depend on the symbolic weight of packaging within a category and on cultural familiarity with disruptive formats.

By varying packaging structure across four categories and three countries, this research identifies when NP packaging enhances consumer inference and when it backfires. It contributes to the literature

by modelling packaging structure as a culturally and categorically contingent cue that marketers must manage carefully to avoid unintended perceptual consequences.

THEORY

In crowded consumer environments, packaging serves as one of the most powerful extrinsic cues consumers rely on when forming inferences about unfamiliar products. For challenger brands (ie a new brand entering an existing product category) without the benefit of strong brand equity or advertising support, packaging often carries the full burden of attracting attention, signalling positioning, building trust and spurring trial. While visual distinctiveness can help new products stand out, it can also disrupt category expectations and undermine fluency, making structural novelty a high-risk, high-reward proposition.

This study builds on three key theoretical streams: cue utilisation theory, typicality and congruency research and sensation transference.



Water in an aluminium beer can package.



Olive oil in a squeezable plastic condiment package.



Sun block lotion in an aerosol metal canister package.



Whiskey in a metal paint thinner package.

Figure 1 Examples of current brands using chaos packaging strategies. Each of these brands has deliberately chosen to market itself with structural packages that deviate from category norms

Cue utilisation theory suggests that in the absence of direct experience or detailed product information, consumers rely on extrinsic cues — such as packaging format, colour and shape — to infer intrinsic attributes such as taste, quality and safety.⁹ This reliance is particularly strong in low-involvement decisions or point-of-sale contexts where heuristic processing dominates. Structure, as a salient extrinsic cue, is likely to influence consumer inference in both intuitive and affective ways.

Typicality theory further explains that consumers form expectations based on past category experiences.¹⁰ When a product aligns with the typical structure for its category, it benefits from processing fluency and cognitive coherence. Conversely, atypical designs may introduce disfluency, triggering confusion or increased cognitive effort. While some degree of disfluency can increase elaboration,¹¹ excessive incongruence often reduces trust and likability, especially when the packaging fails to signal the appropriate usage context.

Sensation transference, introduced by Dr Louis Cheskin,¹² complements these frameworks by demonstrating that consumers unconsciously transfer their perceptions of packaging to the product itself. Attributes like shape, material and format can influence how a product is perceived in terms of taste, quality and performance, even when the product remains unchanged. Contemporary evidence supports this: for example, when Coca-Cola changed its classic red can to white for a holiday campaign, consumers perceived a change in taste despite identical formulation — highlighting the subconscious yet powerful role packaging plays in shaping sensory expectations.¹³

Taken together, these frameworks suggest that structural disruption affects more than just visibility. It shapes cognitive inference, perceived product fit and affective evaluation. Importantly, the effect of structural atypicality is likely to vary based on two moderating factors: product category dynamics and cultural context. First, category dynamics influence how heavily consumers rely on packaging cues (see Figure 2). In categories that have seen little structural change over time — such as cereal, where rectangular paperboard boxes have been the standard for decades — there could be more latitude for disruption without triggering strong negative reactions, especially if the new form draws on familiar, adjacent categories or contexts (eg a cylindrical tub for cereal could evoke the look and feel of oatmeal packaging, another breakfast staple). That said, the traditional cereal box has also become a strategic asset in its own right: its tall, flat surfaces provide brands with ample space for graphics, characters, claims and storytelling, effectively turning the package into an in-aisle billboard. This visual real estate has contributed to the format's persistence, reinforcing the importance of both form and communicative function in structural design. By contrast, alcoholic beverages have a long history of structural experimentation — from the distinctive Absolut Vodka bottle to Crown Royal's iconic shape to Bombay Sapphire's blue-tinted design. In this space, packaging innovation is not only expected but often celebrated, as it carries both symbolic and functional meaning in crowded retail and on-premise environments. That said, when packaging breaks too far from established category norms — for instance, borrowing forms from entirely unrelated, nonconsumable products — it

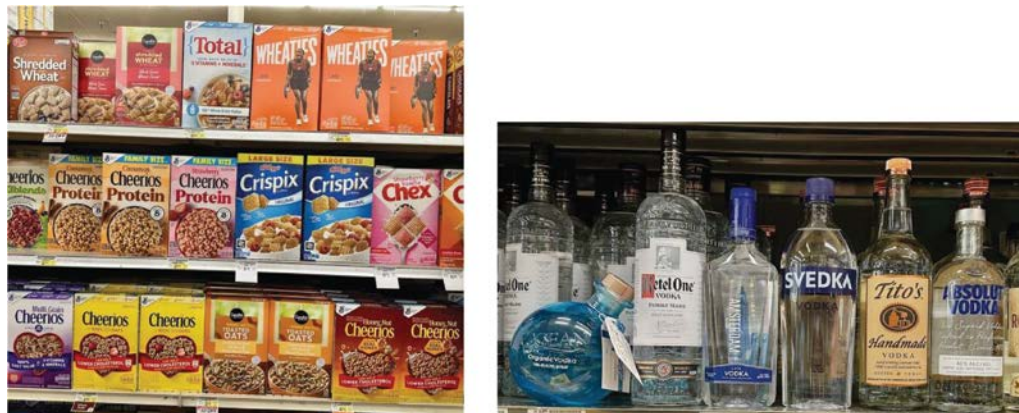


Figure 2 Typical shelf sets for cereal and vodka. Cereal displays use uniform rectangular boxes that create strong brand blocks and ample graphic space; new brands either break this uniformity or follow it. Vodka shelves, by contrast, feature diverse bottle structures designed to stand out and signal identity, requiring new entrants to balance distinctiveness with functional, trustworthy design.

risks undermining consumer perceptions of quality, safety and reliability, even if it offers greater visibility. Secondly, cultural context affects how familiar or acceptable structural novelty appears. Markets like the USA, where consumers are regularly exposed to packaging innovation and brand provocation, may tolerate or even embrace structural divergence. In contrast, in markets like Argentina, where such experimentation is less common, unfamiliarity may translate into perceived risk or confusion.

Building on these theoretical foundations, this study investigates the dual nature of NP packaging: as a driver of attention and innovation, and as a potential source of perceptual mismatch. The research examines whether the same packaging strategy can lead to positive or negative outcomes depending on the product's category norms and the cultural background of the consumer, thus providing important guardrails and implications that marketers should consider when pursuing these strategies.

HYPOTHESES

Four hypotheses that reflect the potential benefits and drawbacks of NP packaging formats, as well as their influence on consumer decision making at various stages, were tested.

H1: NP packaging structures will increase shelf visibility, capturing more attention from shoppers compared to typical packaging formats.

H2: Despite being more attention-grabbing, NP structures will be perceived as less trustworthy, lower in quality and more confusing, especially in categories with strong structural conventions or implicit safety associations. (Note: This hypothesis assumes that the perceptual drawbacks of NP structures will not be uniform across all categories. In categories with low innovation or weak structural conventions, such as cereal, these negative effects may be less pronounced or even reversed.)

H3: Products packaged in formats associated with nonconsumable categories (eg detergents, beauty products or industrial goods) will generate stronger

consumer rejection and greater safety concerns.

H4: Packaging structures that perform well across the full decision funnel — from visibility and curiosity to imagery, interest and stated purchase likelihood — will be more effective in driving consumer consideration. Strategies that focus solely on saliency or perceived innovation, while ignoring other key perceptual and behavioural metrics, will be less effective overall. (Note: This hypothesis reflects a more holistic approach to evaluating NP packaging and is based on the premise that structural novelty must support, and not compromise, consumer inference at each stage of the decision process. Therefore, funnel coherence [not just visibility] becomes critical to packaging success.)

METHOD AND MATERIALS

An online survey was administered to target respondents in three regions: Argentina, the UK and the USA. Six hundred ($n = 600$) interviews were completed on the basis of a structured survey and divided equally among the three regions ($n = 200$ per region).

Qualified respondents were confirmed to be a primary shopper for their household, at least 21 years of age, and users or consumers of the four product categories included in the research: corn flakes cereal, laundry detergent, strawberry jam and vodka. Respondent age, gender and geographies approximated natural representation for the three regions.

Research was framed around a split-cell methodology that isolated package structure as the main variable of interest (see Table 1). Cell 1 represented the control cell. It included four fictional brands (designed to mimic challenger brands entering existing product

categories) with package structures considered typical for products of the four categories. Cell 2, the test cell, included packaging in NP structures for the same four fictional brands.

Graphic representation and detail were the same for each structure within a product category. Additionally, for a more thorough analysis, NP structures in cell 2 included structures that ranged from slightly to radically different from the categories. Finally, the products were selected to represent a range of category dynamics (see Table 2).

Qualified respondents were randomly assigned to one of the cells, each of which was balanced for age, gender and georegion (see Appendix A). Digital colour images (Table 1) of the fictional brands for cereal, detergent, jam and vodka were shown to respondents in a random sequential monadic presentation (ie one at a time, one after the other). A series of questions (see Appendix B) meant to depict a normal purchase decision process when shopping was asked for each product within each cell: Does the product stand out/would it be noticed? Does the product pique curiosity? How is the product perceived for key sensory, performance and positioning attributes? Is there initial interest in trying the product? Is there a claimed commitment to purchase the product? Although fictional for the purposes of the research, the challenger brands were introduced as different products planning to enter the market to be sold at stores or online venues like ones where respondents currently shopped. This was done to provide as realistic a decision funnel as possible for consumers who might encounter new product introductions while shopping.

RESULTS AND DISCUSSION

This section highlights findings that were significantly (confidence levels of 95 per cent or higher) or directionally (confidence levels of 90 per cent) different. Exact *p*-values for all statistical analyses are included in Tables 3–9, using standard conventions (ie *p* = .05 means significance was established at the 95 per cent confidence level; *p* = .01 at the 99 per cent level; *p* = .001 at the 99.9 per cent level).

H1: Shelf visibility: Do NP packages increase saliency?

This hypothesis was supported. Across regions, NP structures were consistently rated as significantly more salient than typical formats (Table 3). The strongest effects were observed in the USA and UK (Table 4), while results in Argentina showed no significant difference, suggesting that saliency gains from structural disruption are context-dependent.

Table 1: Research cell and digital stimuli summary.*The control cell included products packaged in structures typical of the category. The test cell included the same four products with a range of NP structure options. Graphics were the same for each product across the cells, which isolated the package structure as the main variable to measure. *USA designs. Designs for Argentina and the UK were the same except for the descriptor and net weight/volume content designation, which were modified for the local language and region. The authors relied on judgement and professional expertise in describing the degree of structural design differences versus typical products for stimuli used in cell 2

Cell 1: Control Cell – Typical Structure				Cell 2: Test Cell – Nonprototypical Structure			
							
Cereal	Detergent	Jam	Vodka	Cereal	Detergent	Jam	Vodka
Typical for product category				Slightly different	Moderately different	Radically different	Radically different

Table 2: Category dynamic summary. Each of the categories included in the research differs in terms of shopper purchase involvement, degree of homogeneity of structures used by different brands and historical innovation frequency and magnitude

Category	Typical Characteristics
Cereal	High shopper involvement and attention; frequent purchases for some user segments. Packaging dominated by standard cardboard rectangular boxes (a 'sea of sameness'). Perceived as uninspired with virtually no historical innovation.
Detergent	Low shopper involvement; a habitual regular purchase for households. Packaging is mostly plastic jugs for the liquid variant, which has become the norm (other than more recently introduced individual pods in bags or plastic buckets). Little innovation since the powder-to-liquid shift; laundry caps offer some functional benefit.
Jam	Moderate shopper involvement and attention, with regular to occasional purchases for user segments. Packaging dominated by traditional glass jars. Some recent innovations and a shift from conventional packaging to squeezable formats for improved dispensing.
Vodka	High shopper involvement and attention; image-driven and social purchase with strong 'badge value'. Packaging is almost exclusively glass bottles, with some expansion into plastic structures. Historically, a category with a lot of package shape innovation to stand out (both on and off-premise).

By category, cereal in an ice cream-style tub showed the greatest saliency and significant advantage (Table 5), followed by vodka in a gas can (directionally significant). Jam showed no significant difference, likely due to both packaging formats using bold graphics that delivered similar visual standout. This reinforces prior literature suggesting that structure is not the only route to saliency — graphics alone can sometimes suffice.¹⁴ Saliency for detergent in the plastic soda bottle was also not significantly different than the typical detergent structure, possibly due to continuity and familiarity of the consistently used format of the former — thus minimising the ability to stand out and draw attention, even in a different product category.

H2: Perceptual trade-offs: Do NP formats impair trust and quality perceptions?

This hypothesis was partially supported. Across most categories and regions, NP packaging negatively and significantly affected perceptions of trust, quality and product appropriateness (Table 3). These effects were strongest in Argentina and in categories where packaging typically carries safety or performance cues (eg vodka and detergent). For example, vodka in a gas can was rated significantly lower on quality and trust than the typical glass bottle, and detergent in a soda-style bottle raised significant doubts about intended use and safety (Table 5).

An important exception emerged, however: the cereal category.

Table 3: Summary of typical versus NP structure performance: aggregated across regions and product categories

Metric	Typical	NP	p-value
Base*	n = 1,200	n = 1,200	
Would stand out	76%	82%	<.001
Want to learn more	80%	78%	.29
Sensory attributes			
Is high quality	72%	65%	<.001
Would taste good*	78%	73%	.01
Performance attributes			
Would work well*	72%	65%	.06
Would meet needs	81%	71%	<.001
Would better meet needs	63%	57%	.003
Safe to use*	77%	66%	.003
Safe to consume*	85%	74%	<.001
Confusing	13%	28%	<.001
Positioning attributes			
Brand you would trust	73%	66%	<.001
Innovative brand	67%	76%	<.001
Premium brand	64%	61%	.05
Interested in trying with a coupon	86%	80%	<.001
Likely to buy	71%	67%	.05

Figures are top 2 box percentages — those selecting '5' or '4' on 5-point scale (see Appendix B).

*Some attributes were only asked for consumable versus nonconsumable products. Thus, base sizes for 'would work well' and 'safe to use' are n = 300; base sizes for 'would taste good' and 'safe to consume' are n = 900.

Here, the NP tub format not only maintained positive perceptions but also outperformed the typical structure on several imagery metrics (Table 5). Consumers rated the tub significantly higher on perceived quality, premium positioning and taste. These findings suggest that in homogeneous, low-innovation categories, structural novelty may enhance rather than undermine consumer inferences. This divergence also aligns with theories of sensation transference and category fit. The rounded tub may have unconsciously activated associations with dessert or indulgence, shaping taste and quality expectations. It also supports the idea that perceptual drawbacks of structural novelty are not universal but contingent

on category conventions and symbolic coding. For this reason, cereal results are now interpreted as part of a revised H2 discussion rather than a stand-alone hypothesis.

H3: Safety concerns: Are nonconsumable formats seen as confusing or unsafe?

This hypothesis was clearly confirmed. Stimuli presented in formats associated with nonedible or nonconsumable products — especially vodka in a gas can and also jam in metallic tubes — elicited significantly higher confusion and lower safety ratings (Table 5).

For vodka, the gas can design was rated as safe to consume by only 61 per cent of

Table 4: Summary of typical versus NP structure performance by region: aggregated across product categories

Metric	Argentina			UK			USA		
	Typical	NP	p-value	Typical	NP	p-value	Typical	NP	p-value
Base*	n = 400	n = 400		n = 400	n = 400		n = 400	n = 400	
Would stand out	80%	81%	.86	72%	78%	.04	77%	87%	<.001
Want to learn more	83%	80%	.28	77%	74%	.32	81%	82%	.79
Sensory attributes									
Is high quality	78%	61%	<.001	69%	65%	.23	70%	70%	.94
Would taste good*	79%	72%	.05	76%	71%	.20	79%	75%	.29
Performance attributes									
Would work well*	76%	65%	.09	68%	62%	.37	73%	69%	.53
Would meet needs	80%	68%	<.001	82%	70%	<.001	80%	77%	.23
Would better meet needs	71%	50%	<.001	58%	59%	.83	60%	62%	.61
Safe to use*	76%	63%	.05	76%	64%	.06	80%	72%	.19
Safe to consume*	79%	65%	<.001	87%	76%	<.001	88%	82%	.04
Confusing	19%	33%	<.001	7%	29%	<.001	14%	22%	.004
Positioning attributes									
Brand you would trust	77%	62%	<.001	70%	63%	.04	71%	71%	.94
Innovative brand	72%	72%	.81	64%	77%	<.001	65%	79%	<.001
Premium brand	63%	55%	.01	62%	62%	.94	68%	65%	.41
Interested in trying with a coupon	88%	80%	.004	83%	77%	.04	87%	83%	.12
Likely to buy	78%	66%	<.001	67%	66%	.94	68%	69%	.94

Figures are top 2 box percentages — those selecting '5' or '4' on 5-point scale (see Appendix B).

*Some attributes were only asked for consumable versus nonconsumable products. Thus, base sizes for 'would work well' and 'safe to use' are n = 100; base sizes for 'would taste good' and 'safe to consume' are n = 300.

Table 5: Summary of typical versus NP structure performance by product category: aggregated across regions

Metric	Vodka			Cereal			Detergent			Jam		
	Typical	NP	p-value	Typical	NP	p-value	Typical	NP	p-value	Typical	NP	p-value
Base*	n = 300	n = 300		n = 300	n = 300		n = 300	n = 300		n = 300	n = 300	
Would stand out	78%	83%	.10	70%	84%	<.001	70%	73%	.42	87%	87%	.84
Want to learn more	83%	75%	.02	72%	81%	.01	75%	75%	.93	90%	83%	.01
Sensory attributes												
Is high quality	75%	58%	<.001	63%	73%	.01	63%	58%	.28	87%	70%	<.001
Would taste good*	76%	61%	<.001	71%	78%	.06	-	-	-	86%	79%	.02
Performance attributes												
Would work well*	-	-	-	-	-	-	72%	65%	.06	-	-	-
Would meet needs	80%	61%	<.001	79%	77%	.56	75%	71%	.23	89%	76%	<.001
Would better meet needs	63%	50%	.002	59%	63%	.40	59%	53%	.10	70%	62%	.04
Safe to use*	-	-	-	-	-	-	77%	66%	.003	-	-	-
Safe to consume*	82%	61%	<.001	84%	82%	.59	-	-	-	88%	80%	.004
Confusing	12%	40%	<.001	13%	20%	.02	16%	25%	.01	12%	26%	<.001
Positioning attributes												
Brand you would trust	72%	60%	.001	70%	71%	.65	70%	61%	.03	79%	70%	.01
Innovative brand	71%	77%	.06	63%	78%	<.001	63%	64%	.87	71%	84%	<.001
Premium brand	69%	56%	<.001	57%	66%	.03	55%	51%	.29	76%	69%	.05
Interested in trying with a coupon	88%	70%	<.001	80%	86%	.05	82%	77%	.13	94%	87%	.01
Likely to buy	73%	60%	.001	64%	73%	.02	65%	60%	.21	81%	74%	.06

Figures are top 2 box percentages — those selecting '5' or '4' on 5-point scale (see Appendix B).

*Some attributes were only asked for consumable versus nonconsumable products. Thus, base sizes for 'would work well' and 'safe to use' are $n = 75$; base sizes for 'would taste good' and 'safe to consume' are $n = 225$.

respondents, significantly less compared to the 82 per cent who said the same for the typical vodka bottle (Table 5). This was particularly alarming in Argentina, where only 48 per cent considered the vodka-in-can design safe (Table 6).

Jam in the metallic tube was deemed to be significantly less safe than jam in the typical glass jar, even though a high percentage (80 per cent) considered the former safe to use (Table 5). This may be the result of squeezable formats being used by some brands in some markets for this product category, thus easing any safety concerns. Once again, Argentinians

were most concerned with the safety of the tube structure (Table 9).

The same trend was observed for detergent, but in the opposite manner; specifically, the detergent (a nonconsumable) in a soda bottle (a typical consumable format) was deemed as being significantly less safe: 66 per cent perceiving this versus 77 per cent for the typical jug (Table 5). Once again, the strongest negative effect was seen in Argentina (Table 8).

Open-ended responses reflected this confusion clearly (Table 10). Many participants described the vodka as looking like 'a product for my car', 'not

Table 6: Summary of typical versus NP structure performance by region: vodka

Metric	Argentina			UK			USA		
	Typical	NP	p-value	Typical	NP	p-value	Typical	NP	p-value
Base	n = 100	n = 100		n = 100	n = 100		n = 100	n = 100	
Would stand out	81%	78%	.60	75%	82%	.23	78%	90%	.02
Want to learn more	83%	75%	.17	84%	76%	.16	83%	75%	.17
Sensory attributes									
Is high quality	81%	54%	<.001	73%	59%	.04	71%	61%	.14
Would taste good	77%	58%	.004	74%	64%	.13	77%	61%	.01
Performance attributes									
Would meet needs	75%	53%	.001	84%	63%	<.001	81%	68%	.04
Would better meet needs	71%	42%	<.001	59%	54%	.48	58%	55%	.67
Safe to consume	76%	48%	<.001	86%	64%	<.001	85%	71%	.02
Confusing	18%	52%	<.001	8%	39%	<.001	10%	30%	<.001
Positioning attributes									
Brand you would trust	78%	52%	<.001	66%	60%	.38	72%	67%	.44
Innovative brand	77%	73%	.51	66%	78%	.06	69%	81%	.05
Premium brand	67%	47%	.004	69%	63%	.37	72%	59%	.05
Interested in trying with a coupon	89%	68%	<.001	87%	71%	.01	87%	72%	.01
Likely to buy	76%	53%	<.001	71%	63%	.23	71%	65%	.36

Figures are top 2 box percentages — those selecting '5' or '4' on 5-point scale (see Appendix B).

a food product' or 'dangerous', while others noted the detergent looked like a beverage. Jam was characterised as being similar to 'paint I would use in school', 'toothpaste' or 'lithium grease tubes'. These comments reinforce that the safety concerns were intuitive, immediate and widely shared and highlight the risk of perceptual misalignment when structural cues borrowed from other product domains conflict with established usage expectations — important implications and hurdles that marketers are likely to face, and thus manage, if pursuing strategies like this.

H4: Full-funnel performance: Does structural novelty hold up across all decision stages?

This hypothesis was supported. When evaluating packaging effectiveness across

the full decision funnel — from visual salience and innovation, to curiosity, imagery, interest and stated purchase intent — only one product consistently and significantly performed well in an NP structure: cereal. In contrast, vodka demonstrated strong saliency and innovation but failed to deliver on imagery and purchase interest, resulting in poor overall performance. Jam was considered innovative, but failed to improve saliency and had diminished perceptual imagery for quality, trust, safety and functional performance, leading to decreased interest. Detergent was neither salient nor innovative, and as mentioned previously, was considered significantly less safe and trustworthy (Table 5).

Figure 3 shows funnel-stage results across all categories (as well as category dynamic details) and points

Table 7: Summary of typical versus NP structure performance by region: cereal

Metric	Argentina			UK			USA		
	Typical	NP	p-value	Typical	NP	p-value	Typical	NP	p-value
Base	n = 100	n = 100		n = 100	n = 100		n = 100	n = 100	
Would stand out	78%	87%	.09	63%	76%	.05	68%	90%	<.001
Want to learn more	82%	84%	.71	63%	74%	.09	71%	85%	.02
Sensory attributes									
Is high quality	70%	72%	.76	57%	71%	.04	63%	77%	.03
Would taste good	75%	80%	.40	67%	74%	.28	72%	80%	.19
Performance attributes									
Would meet needs	82%	74%	.17	78%	75%	.62	76%	81%	.39
Would better meet needs	69%	62%	.30	53%	61%	.25	56%	65%	.19
Safe to consume	81%	76%	.39	86%	84%	.69	85%	87%	.68
Confusing	19%	20%	.86	4%	24%	<.001	15%	16%	.85
Positioning attributes									
Brand you would trust	79%	73%	.32	66%	63%	.66	64%	78%	.03
Innovative brand	72%	75%	.63	57%	80%	<.001	61%	78%	.01
Premium brand	61%	63%	.77	50%	63%	.06	60%	71%	.10
Interested in trying with a coupon	85%	87%	.68	76%	84%	.16	80%	88%	.12
Likely to buy	76%	79%	.61	55%	68%	.06	62%	72%	.13

Figures are top 2 box percentages — those selecting '5' or '4' on 5-point scale (see Appendix B).

Table 8: Summary of typical versus NP structure performance by region: detergent

Metric	Argentina			UK			USA		
	Typical	NP	p-value	Typical	NP	p-value	Typical	NP	p-value
Base	n = 100	n = 100		n = 100	n = 100		n = 100	n = 100	
Would stand out	73%	69%	.53	67%	71%	.54	69%	78%	.15
Want to learn more	79%	74%	.41	72%	71%	.88	74%	79%	.41
Sensory attributes									
Is high quality	70%	52%	.01	60%	60%	.91	58%	63%	.47
Performance attributes									
Would work well	76%	65%	.09	68%	62%	.37	73%	69%	.53
Would meet needs	77%	70%	.26	75%	66%	.16	73%	76%	.63
Would better meet needs	68%	41%	<.001	53%	56%	.67	57%	61%	.85
Safe to use	76%	63%	.05	76%	64%	.06	80%	72%	.19
Confusing	20%	25%	.40	11%	27%	.004	18%	24%	.30
Positioning attributes									
Brand you would trust	73%	59%	.04	68%	60%	.24	69%	65%	.55
Innovative brand	65%	57%	.25	62%	65%	.66	62%	69%	.30
Premium brand	52%	41%	.12	55%	53%	.78	58%	58%	.92
Interested in trying with a coupon	88%	79%	.09	75%	71%	.53	82%	80%	.72
Likely to buy	74%	60%	.04	63%	61%	.77	59%	60%	.89

Figures are top 2 box percentages — those selecting '5' or '4' on 5-point scale (see Appendix B).

Table 9: Summary of typical versus NP structure performance by region: jam

Metric	Argentina			UK			USA		
	Typical	NP	p-value	Typical	NP	p-value	Typical	NP	p-value
Base	n = 100	n = 100		n = 100	n = 100		n = 100	n = 100	
Would stand out	88%	88%	.93	81%	82%	.86	92%	91%	.80
Want to learn more	86%	85%	.84	89%	75%	.01	96%	88%	.04
Sensory attributes									
Is high quality	89%	64%	<.001	85%	69%	.01	87%	77%	.07
Would taste good	85%	78%	.20	86%	75%	.05	88%	85%	.54
Performance attributes									
Would meet needs	87%	73%	.01	89%	75%	.01	90%	81%	.07
Would better meet needs	74%	56%	.01	68%	65%	.65	69%	66%	.65
Safe to consume	81%	70%	.07	90%	81%	.07	94%	88%	.14
Confusing	19%	34%	.02	4%	27%	<.001	12%	16%	.42
Positioning attributes									
Brand you would trust	77%	65%	.06	80%	69%	.07	79%	75%	.50
Innovative brand	75%	81%	.31	69%	83%	.02	68%	89%	<.001
Premium brand	73%	67%	.36	74%	68%	.35	82%	73%	.13
Interested in trying with a coupon	89%	87%	.66	94%	83%	.02	98%	91%	.03
Likely to buy	84%	73%	.06	77%	73%	.51	81%	77%	.49

Figures are top 2 box percentages — those selecting '5' or '4' on 5-point scale (see Appendix B).

to the potentially negative hurdles and implications marketers could face when focusing solely on attention or innovation metrics. Without reinforcing product credibility and desirability through the entire funnel, initial advantages (such as saliency or innovative perceptions) do not automatically translate into positive imagery and overall intent for trial. This supports prior calls for a holistic evaluation model, integrating both perceptual and behavioural metrics, when assessing packaging effectiveness. It also demonstrates the value in understanding certain category dynamic parameters, which can provide insights to help in decision making (eg does a proposed package deviate from typical category consumption/usage? or how is the category characterised in terms of historical innovation or current structure variation?).

GENERAL BUSINESS IMPLICATIONS

This research offers several practical insights for marketers considering NP packaging strategies, particularly for challenger brands entering established categories.

Evaluate the full decision funnel, not just top-of-funnel metrics.

Visual saliency and perceived innovation at the 'first moment of truth' are important, but they do not guarantee purchase interest or intent. In this study, the vodka NP format scored high on attention but failed to deliver positive sensory imagery or trust, undermining its effectiveness further down the funnel. Conversely, cereal in a NP tub succeeded precisely because it performed well across all funnel stages, including sensory and other key attributes. Packaging

		Nonprototypical (NP) Structure Performance				
Measurement Assessment	Metric	Vodka	Cereal	Detergent	Jam	
Purchase Funnel Stage	Saliency	Would stand out	Green	Green	White	White
	Pique curiosity	Want to learn more	Red	Green	White	Red
	Sensory imagery	High quality	Red	Green	N/A	Red
		Taste good	Red	Green	N/A	Red
	Performance imagery	Work well	N/A	N/A	Red	N/A
		Meet needs	Red	White	White	Red
		Better meet needs	Red	White	White	Red
		Safe to consume/use	Red	White	Red	Red
		Confusing	Green	Green	Green	Green
	Positioning imagery	Trust	Red	White	Red	Red
		Innovative	Green	Green	White	Green
		Premium	Red	Green	White	Red
	Encourage trial	Interested to try	Red	Green	White	Red
		Likely to buy	Red	Green	White	Red
	Category dynamic parameters			None/very	Little/very	Some/mostly
	Category structure variation	Broad	homogeneous	homogeneous	homogeneous	
	Category innovation history	Frequent	Virtually none	Infrequent	Some	
	Shopper involvement	High	High	Low	Medium	
	Does NP structure align with category usage?	No	Yes	No	No	

Figure 3 Summary of NP structure performance. The cereal NP format demonstrates the strongest full funnel performance among all NP options (green = higher/stronger ratings than typical structure; red = lower/weaker ratings than typical structure; white = comparable ratings between structures). The cereal NP is the only structure that aligned with category usage. N/A = not applicable for that product category.

strategies should therefore be assessed holistically, not just for visibility, but for how well they support consumer inference across the path to purchase.

Consider category dynamics before pursuing disruption.

Structural expectations vary across product types. In categories with strong

symbolic meaning or safety concerns — such as alcohol or cleaning products — deviation from structural norms can lead to confusion and rejection. In contrast, categories marked by homogeneity and low innovation (like cereal) may benefit from disruption, particularly when novel forms activate familiar or desirable associations (eg indulgence, freshness). These dynamics should be understood

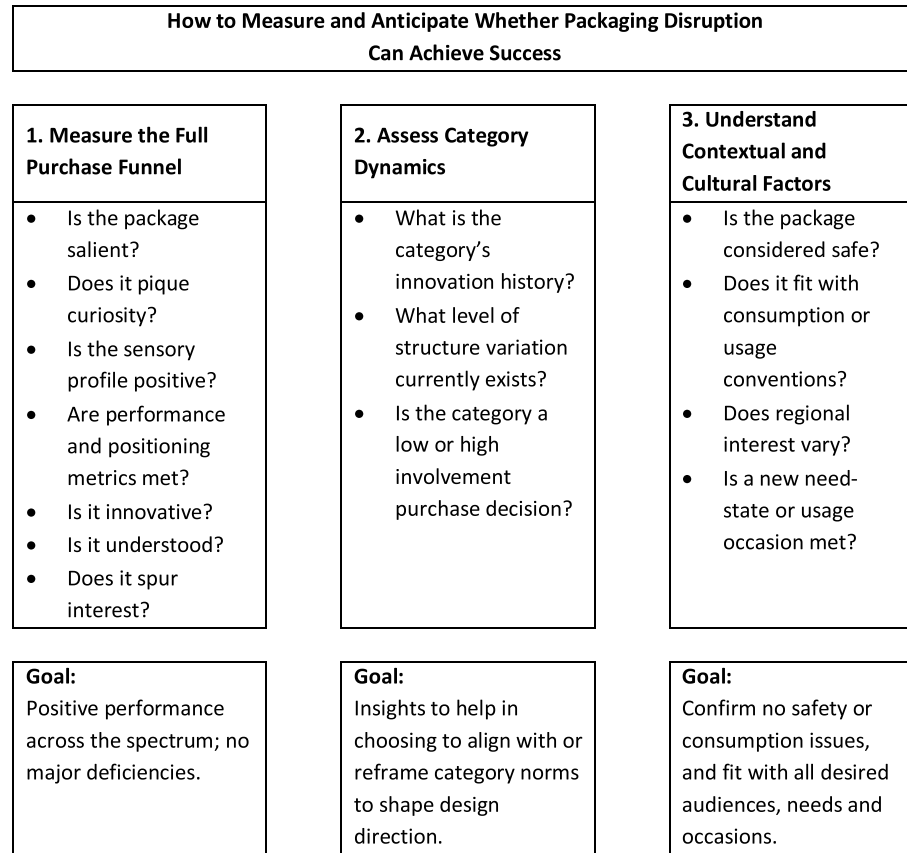


Figure 4 The NP packaging framework. The main core question and subquestions to understand and address for brands considering this strategy

and used to augment the more traditional funnel performance metrics to aid in design and decision making.

can be applied globally or if it requires localisation.

Account for cultural receptivity to packaging novelty.

Responses to structural disruption differed markedly across countries. The USA and UK shoppers were generally more tolerant of NP formats, whereas Argentine consumers showed greater scepticism, particularly for formats that deviated from local norms. Marketers planning multiregion launches must consider the cultural coding of packaging and assess whether the same strategy

Anticipate perceptual and functional risks, especially when packaging mimics nonconsumables.

The findings of this study reaffirm that packaging structure does not just convey branding; it also signals use, safety and category fit. Designs that borrow from industrial or household products (eg gas cans for distilled spirits/beverages or soda bottles for detergents) can backfire if they clash with the consumer's mental model of what is safe or appropriate for consumption. These perceptual risks

Table 10: Verbatim comment summary for NP package structures: by product category.*

<i>Vodka</i>	<i>Cereal</i>	<i>Detergent</i>	<i>Jam</i>
<p>Main takeaway: Dominant themes are mostly negative and revolve around association with a completely different (and nonconsumable) category, which leads to confusion, safety and trust issues.</p> <p>Supporting comments: 'I thought it was something for my car' 'Looks like a gas can, not vodka' 'Looks lethal and can harm my health' 'Confusing — I don't know if it's a drink or a car product' 'Makes me feel distrustful'</p>	<p>Main takeaway: Dominant themes are mostly positive and focus on the distinctive, modern and eye-catching structure that differs from traditional cereal boxes. There is some concern expressed about specific functionality challenges.</p> <p>Supporting comments: 'Innovative and eye-catching — I'd try it' 'Never seen cornflakes in a tub like this' 'Looks modern and eye-catching on the shelf' 'Would be hard to store several' 'It would be easier to stack regular cereal boxes'</p>	<p>Main takeaway: Dominant themes are mostly negative or mixed, led by safety concerns for being associated with other categories and confusion as a drinkable liquid.</p> <p>Supporting comments: 'Dangerously packaged — a child might mistake it for a flavoured soda brand' 'I think cleaning solution in a drinks bottle is a safety risk' 'Looks like a bottle of fizzy pop' 'It looks like mouthwash, not very enticing or tempting' 'Cannot really say, does not look like a cleaning agent'</p>	<p>Main takeaway: Dominant themes are mixed. The structure is deemed as being innovative for the category and offering some convenience, but also strongly associated with completely different categories, prompting safety concerns.</p> <p>Supporting comments: 'What an innovation. Very different, never seen before' 'I see it as innovative, and the case is eye-catching' 'Convenient, squeeze tube easy to use. Good for kids' 'It looks like paint that I would use in school when I was younger. It does not look like something you would eat' 'Looks like a toothpaste or lithium grease tube'</p>

*Open-ended responses based on the question: Please describe what comes to mind when you see this brand.

have real-world consequences, including consumer complaints and misuse.

Consider contextual factors that were beyond the scope of this study, but are strategically relevant.

Other dimensions, such as functionality/user experience, portability, usage occasions, need-states or environmental values, may interact with packaging performance. For instance, a NP format that facilitates on-the-go consumption or reuse may gain acceptance even if it initially appears disruptive (eg cereal bars, wine in cans, yoghurt in squeezable tubes). Future research should explore how these functional benefits mediate or moderate consumer perception in real-world scenarios.

In sum, while structural disruption can help a product stand out, it can just as easily cause it to be misunderstood or rejected. Effective packaging design — particularly for challenger brands —

requires more than creativity; it requires alignment with consumer expectations, category conventions, contextual cues and functional user experiences at every step of the decision journey. Results from this research suggest that marketers must balance novelty with coherence, and test not only what attracts attention but also what influences perception and builds belief. A framework summarised in Figure 4 is a helpful guide for determining whether NP packaging will deliver on marketers' goals with these strategies.

CONCLUSION

This research contributes to the growing conversation around NP packaging by offering both theoretical insights and practical guidance on when structural disruption helps — or hinders — consumer decision making. While many marketers assume that novelty alone drives attention and trial, these findings

show that packaging effectiveness depends on more than just visibility. When structure violates category norms or clashes with consumer expectations, it can undermine perceived quality, trust and even safety — especially in categories that carry symbolic or functional meaning.

Importantly, the study introduces a broader framework for evaluating packaging success: a framework that moves beyond single-metric assessments and considers performance across the full decision funnel. In this model, saliency is just the starting point. To convert attention into intent, packaging must also communicate desirable sensory imagery, brand fit and reassurance. The cereal category demonstrated how structural novelty can succeed when it supports these downstream outcomes. In contrast, categories like vodka revealed how striking packaging can fall short when it fails to deliver credibility and coherence.

The findings also underscore the importance of contextual factors. Category conventions, cultural familiarity with packaging innovation and even cross-category associations all moderate how consumers interpret and respond to structural deviation. While this study did not test functional benefits or usage-driven formats, these represent promising areas for future research — particularly as packaging continues to evolve in response to new consumption occasions and sustainability demands.

In conclusion, NP packaging is not inherently good or bad. While there is truth that these tactics have been successful in generating social media buzz and attention because they have broken category norms, success is dependent on more than visual disruption. Marketers must also confirm that these tactics align with the mental models consumers use to

infer product quality, fit, usage experience and appropriateness. This study provides a theory-informed, data-driven foundation for marketers to assess those trade-offs — helping to reduce risk and improve the odds of success when deviating from the expected.

FURTHER RESEARCH

While this study offers important insight into consumer responses to NP packaging, several research opportunities remain. First, although multiple funnel stages were examined, future work should explore how responses change over time. Longitudinal research could show whether novelty effects fade or whether repeated exposure builds familiarity and trust in initially disruptive formats.

Secondly, because fictional brands were used to isolate structural effects, future studies should test how brand equity interacts with packaging typicality. Strong brands may be better able to counteract the perceptual drawbacks of NP designs, which is relevant for established brands trialling limited-time or promotional formats.

Thirdly, further work should examine how functional or usage-based benefits shape acceptance of structural novelty. Packaging that enhances convenience, portability or sustainability may be embraced even when it diverges from category norms, and understanding when functional value outweighs perceptual risk could guide innovation strategy.

Fourthly, this study uncovered cross-cultural differences in responses to atypical packaging. Extending research to more Latin American, European and Asian markets would clarify how cultural norms, design fluency and exposure to global brands influence tolerance for structural divergence.

Finally, future work could refine and test the framework introduced here by modelling structural packaging as a multidimensional cue shaping both perceptual and behavioural outcomes. A more integrated approach would help identify when disruption is most likely to succeed and link insights across packaging, branding and consumer inference research.

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Appendix A: Demographic summary by cell within region

	<i>Argentina</i>		<i>UK</i>		<i>USA</i>	
	<i>Cell 1</i>	<i>Cell 2</i>	<i>Cell 1</i>	<i>Cell 2</i>	<i>Cell 1</i>	<i>Cell 2</i>
Sample size	<i>n</i> = 100	<i>n</i> = 100	<i>n</i> = 100	<i>n</i> = 100	<i>n</i> = 100	<i>n</i> = 100
Gender						
Female	49%	49%	51%	51%	50%	50%
Male	51%	51%	49%	49%	50%	50%
Age						
Younger (21–39)	42%	38%	43%	43%	38%	41%
Older (40+)	58%	62%	57%	57%	62%	59%
Geo region	-	-	-	-	-	-
Pampas	59%	61%	-	-	-	-
Argentine Northwest	9%	8%	-	-	-	-
Gran Chaco	9%	7%	-	-	-	-
Patagonia	6%	8%	-	-	-	-
Mesopotamia	7%	9%	-	-	-	-
Cuyo	10%	7%	-	-	-	-
Northeast/Northwest	-	-	15%	15%	-	-
Yorkshire	-	-	9%	7%	-	-
East/West Midlands	-	-	15%	19%	-	-
Southeast/Southwest	-	-	21%	20%	-	-
London	-	-	14%	15%	-	-
Scotland	-	-	10%	10%	-	-
Wales	-	-	3%	5%	-	-
Northern Ireland	-	-	4%	2%	-	-
Northeast	-	-	-	-	19%	21%
Midwest	-	-	-	-	20%	21%
South	-	-	-	-	37%	32%
West	-	-	-	-	24%	26%

Appendix B: Survey details

Introduction to survey participants: You are invited to share your opinions on different brands that are planning to enter the market and may be sold at stores or online, similar to where you currently shop or buy such products. Different images of these brands will be shown one at a time, followed by a series of questions for each brand.

<i>Measurement Area</i>	<i>Survey Question Asked*</i>	<i>Response Scale</i>
Does the product stand out/would it be noticed?	Which best describes whether you would notice this product based on where you would be most likely to buy it?	1 = Would not stand out at all 2 = Would not really stand out 3 = Not sure 4 = Would somewhat stand out 5 = Would strongly stand out
Does the product pique curiosity?	Which of the following best describes whether you would want to learn more about this brand?	1 = Not at all interested 2 = Not really interested 3 = Neither interested/uninterested 4 = Somewhat interested 5 = Strongly interested
How is the product perceived for key sensory, performance and positioning attributes?	How much do you agree or disagree with the following statements for this brand? Sensory attributes High quality Taste good Performance attributes Work well Would meet needs Would better meet needs Safe to use/consume Confusing Positioning attributes Would trust Is innovative Is premium	1 = Strongly disagree 2 = Somewhat disagree 3 = Neither agree/disagree 4 = Somewhat agree 5 = Strongly agree
Is there initial interest in trying the product?	How interested would you be in trying this brand if you were offered a discount coupon?	1 = Not interested at all 2 = Not really interested 3 = Neither interested/uninterested 4 = Somewhat interested 5 = Definitely interested
Is there a claimed commitment to purchase the product?	How likely would you be to buy this brand the next time you needed that type of product?	1 = Definitely would not buy 2 = Probably would not buy 3 = Might/might not buy 4 = Probably would buy 5 = Definitely would buy

*Attribute statements were shown in rotated order and without the category designation.