

How Brand Alliances Acquire New Households and Retain Them Across Adjacent Categories in Consumer Packaged Goods

Thanawat Srisuk¹ and Prasert Kongsiri²

¹Department of Business Administration, Sakon Nakhon Rajabhat University, 680 Nittayo Road, That Choeng Chum Subdistrict, Mueang Sakon Nakhon, Sakon Nakhon 47000, Thailand

²Faculty of Management Sciences, Ubon Ratchathani Rajabhat University, 2 Ratchathani Road, Nai Mueang Subdistrict, Mueang Ubon Ratchathani, Ubon Ratchathani 34000, Thailand

ABSTRACT Brand alliances are often judged by launch visibility, short-run sales, or investor response, yet those metrics do not reveal whether the alliance actually changes the household composition of demand. A jointly branded product can post strong early volume while merely redistributing purchases among households that already belonged to one partner or the other. This paper studies a different question: when do brand alliances recruit households that are genuinely new to the host category, and when do those recruited households remain active after the first purchase? Using household-level scanner data from consumer packaged goods markets, the analysis tracks first purchase, repeat purchase, basket expansion, and cannibalization for allied and matched single-branded product introductions over a twelve-year period. The design links product launches to prelaunch household repertoires, allowing the overlap between partner audiences to be measured directly rather than inferred from category similarity. The results show that alliances recruit more category-new households than comparable single-branded launches, but the gain is sharply nonlinear. Recruitment is highest when the two partner brands have moderate prelaunch audience overlap rather than very high or very low overlap. Repeat purchase follows a different pattern. Alliances with balanced partner prominence and substantive product integration retain households more effectively, whereas heavily asymmetric or purely endorsement-oriented alliances generate more trial but weaker stabilization. The evidence also indicates that alliance performance depends on who is being recruited. Among households already loyal to the primary brand, a sizable portion of alliance volume displaces incumbent products. Among households entering from adjacent repertoires, the alliance produces broader baskets and higher twelve-month revenue. The findings suggest that household acquisition and household retention are separate margins of alliance value and should not be collapsed into a single launch metric.

KEYWORDS

1. Introduction

Brand alliances are usually discussed as market events that combine two recognizable names in a single offer [1]. Once the product is launched, scholars and managers tend to ask whether consumers like it, whether retailers support it, or whether investors revise firm value upward. Those questions are useful, but they leave open a more concrete issue: who actually buys the

new product, and what happens to those households after the first transaction? A jointly branded product can appear successful in the aggregate even when it is mostly purchased by households who would have bought one of the partner brands anyway. Another alliance can look modest at launch while quietly drawing households who were absent from the focal category and then converting them into repeat purchasers. If the household composition of demand differs that much, the economic meaning of identical sales totals is not the same.

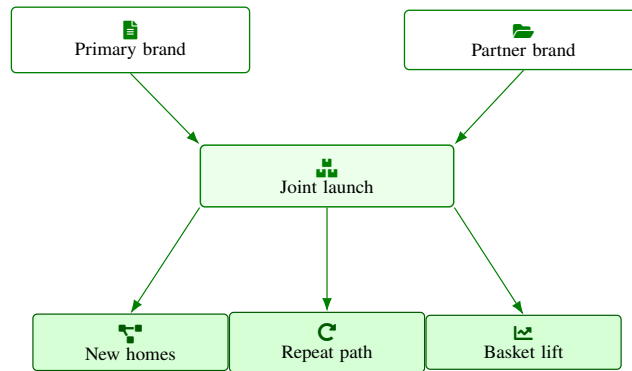


Figure 1 A joint launch is framed as the mechanism that links two brands to three downstream outcomes: recruitment of households that were not previously active in the host category, stabilization through repeat buying, and broader basket activity beyond the focal item.

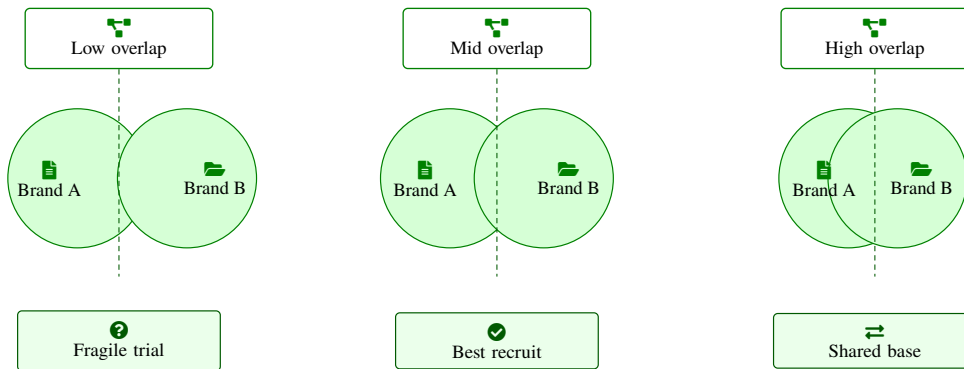


Figure 2 The alliance effect is shown as nonlinear in prelaunch audience overlap. Extremely low overlap can create curiosity without a durable fit, very high overlap mostly reaches households already shared by both brands, and moderate overlap produces the strongest acquisition of households that are meaningful new to the host category.

This paper examines brand alliances from that household-composition perspective. The starting point is simple. Every launch changes demand through two separable margins. One margin is acquisition. A product may attract households who have not been buying in the host category, or who have been buying in adjacent categories but not the focal one, or who know one partner brand but not the other. The other margin is stabilization. After that first purchase, the household either buys again, broadens its purchasing around the new product, or lapses after trial. These margins need not move together [2]. A product can be excellent at acquisition and poor at stabilization. It can also be selective at acquisition yet effective at retaining the households it reaches. Brand alliances are especially likely to display this divergence because they place two memory structures, two reputational cues, and often two usage contexts in front of the same shopper at once.

That divergence matters because the economics of an alliance depend on whether the new product expands the firm's franchise or merely reallocates existing demand. If the alliance mostly brings in households already deeply loyal to the primary brand, then part of the observed volume may be cannibalization of the firm's own line. If it brings in households strongly attached to the secondary brand but not to the host category, then the alliance may operate as a transfer bridge across categories. If it brings in households who know neither partner especially well, then

trial may be broad but fragile. The distinction is commercially important. Early unit sales generated by cannibalization, partner-brand switching, or genuinely new category entry imply different futures for margin, repeat purchase, and portfolio growth.

The household perspective is also necessary because the observable signal sent by a brand alliance is layered. At the product level, the joint offer can indicate novelty, quality, or symbolic relevance. At the household level, however, the same alliance may function as a recognition shortcut for some buyers, as permission to enter a new category for others, and as a mere variant substitution for still others [3]. The same launch can therefore contain different decision logics across households. Aggregate data are not well suited to isolating those logics. Household panels, by contrast, reveal who is new to the category, who is new to one partner brand, who already purchased both brands separately before the alliance, and whether the purchase changes future repertoire behavior.

A further reason to examine household composition is that alliance success is often attributed to fit or strength without specifying which population actually experiences the purported benefit. A pair of strong brands may be attractive in the abstract, but if their household audiences already overlap extensively, the alliance may recruit relatively few new households because the available base is already shared. Another pair may have lower combined prestige but more complementary audiences, allow-

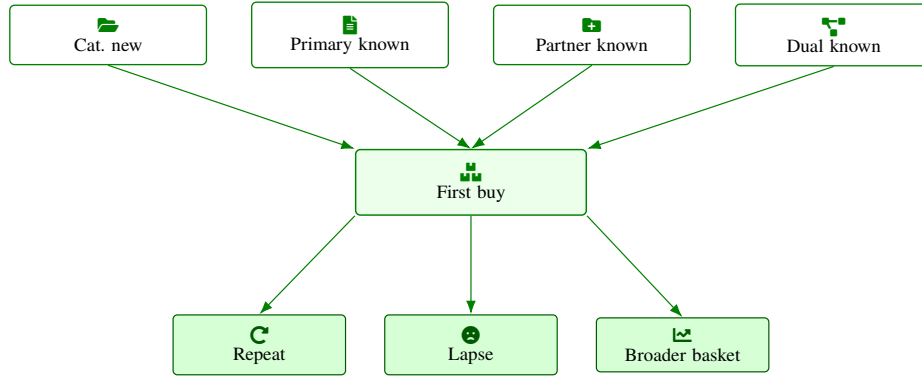


Figure 3 Households are partitioned by prelaunch repertoire state before the first allied purchase occurs. Once trial happens, the post-purchase path can diverge sharply into repeat behavior, immediate lapse, or broader spending across related baskets, which is why acquisition and retention are treated as separate margins of alliance value.

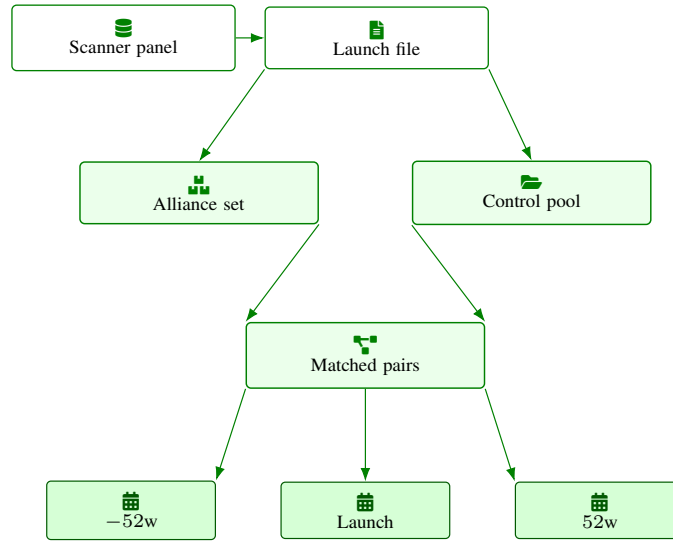


Figure 4 The empirical design links a long household scanner panel to a launch-level file, then separates allied introductions from matched single-branded controls. Symmetric windows before and after launch make it possible to reconstruct household repertoires, identify category-new entry, and measure whether alliance-driven trial persists over time.

ing the allied product to recruit households from one partner’s repertoire into the other’s category. The first alliance may create a stronger symbolic signal; the second may create more genuine household expansion. Without directly measuring prelaunch audience overlap, these possibilities are hard to distinguish.

Prior work has clarified that brand alliances can create value under certain conditions, but it has mainly done so at levels other than the household. Cao and Sorescu (2013) show that cobranded product announcements in consumer packaged goods are associated with positive stock-market reactions and that the reaction is stronger when the alliance exhibits higher consistency, exclusivity, and innovativeness [4]. That evidence indicates that markets are not indifferent to alliance structure. Yet abnormal returns do not disclose whether the expected value comes from recruiting new households, increasing spend among existing households, or merely shifting purchases across products already in the firm’s portfolio [5]. The present study focuses on that missing layer by asking how alliances reshape household incidence, repeat behavior, and category migration after the

product becomes available for purchase.

The research setting is the consumer packaged goods market, where alliances frequently appear in forms ranging from co-formulated food products to ingredient-branded personal care items and visibly endorsed seasonal lines. This setting is useful because households purchase repeatedly, category histories are observable, and a launch can be compared with matched single-branded introductions that enter similar shelf environments. The data trace more than seventy thousand households over twelve years and link weekly purchases to product launches by allied and nonallied brands. This makes it possible to construct prelaunch household repertoires, identify category-new households, track repeat purchase, and estimate how much alliance volume is incremental rather than cannibalized.

The paper develops an empirical argument organized around three ideas. The first is that brand alliances should recruit more category-new households than otherwise similar single-branded introductions because the presence of a second brand lowers search and interpretation costs for some households. The second

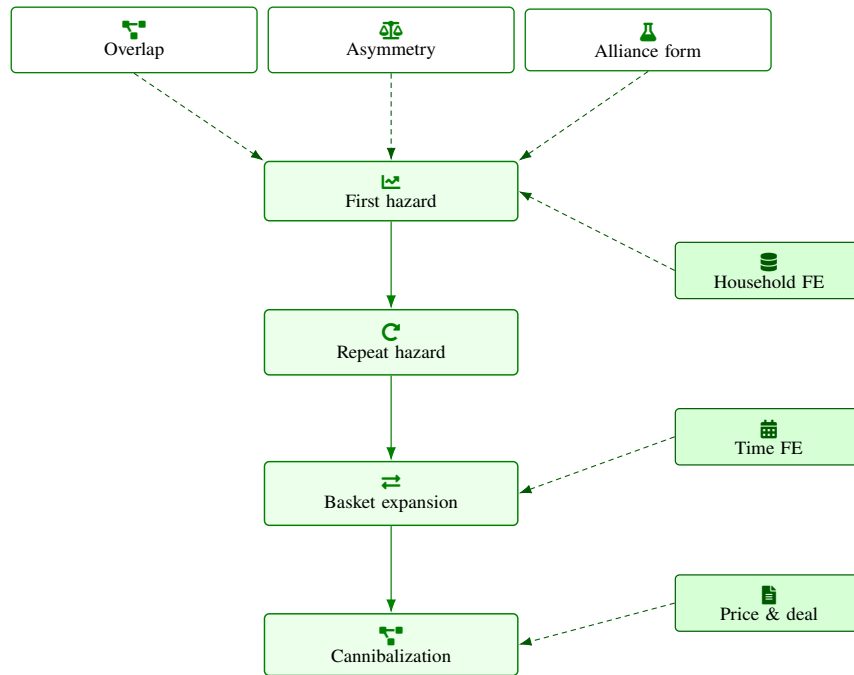


Figure 5 The modeling architecture is layered rather than compressed into a single sales outcome. Trial incidence, repeat purchase, basket expansion, and cannibalization are handled as distinct behavioral transitions, while fixed effects and transaction conditions absorb household heterogeneity and local market context.

is that this recruitment effect should depend on prelaunch audience overlap between the partner brands. When overlap is too high, the alliance offers limited access to truly new households because the partners already draw from a similar base. When overlap is too low, the alliance may be difficult to interpret or may attract curiosity without yielding stable usage. Moderate overlap should therefore be the most productive zone for acquisition. The third idea is that the households drawn by the alliance are not equally retainable [6]. Repeat purchase should be more likely when the partners are balanced in market prominence and when the product structure is substantive enough to make the joint proposition feel durable rather than purely decorative.

These claims make the paper distinct from studies that focus on announcement effects, partner sequencing, or retail pass-through. The core phenomenon here is not whether the alliance is noticed by the market or by retailers, but whether it changes the composition of households in a way that survives first purchase. The distinction matters because an alliance can receive attention without changing franchise boundaries, and it can enter broadly at retail without stabilizing new buyers. A household-centered analysis can therefore add an explanatory layer that is not visible in event studies or store-level panels alone.

The paper proceeds in five further sections. The next section explains why acquisition and stabilization are likely to diverge in brand alliances and develops household-level expectations about audience overlap, prominence asymmetry, and alliance form. The following section describes the observed households, product matches, and category definitions. The fourth section presents the measurement strategy and the statistical models used to estimate first purchase, repeat purchase, basket expansion, and cannibalization. The fifth section reports the main empirical

results. The sixth section decomposes where the gains actually come from by separating category-new recruitment from partner-brand switching and own-brand displacement. The final section concludes by returning to the idea that alliance value is partly a composition problem: it matters not only how much a product sells, but to whom it sells and whether those households remain [7].

2. Why Trial and Retention Diverge

A household does not encounter a brand alliance under laboratory conditions. It encounters it in the course of ordinary shopping, carrying a history of category habits, brand associations, and budget rules. That history is central because the same alliance will be processed differently depending on what the household already buys. A household that routinely purchases the secondary brand in another category but has never bought in the host category may treat the alliance as a bridge into a new aisle. A household already loyal to the primary brand may treat the alliance as a variant within an existing repertoire. A household familiar with both brands but committed to neither may respond mainly to the novelty signal. These are not minor differences. They determine whether the alliance expands the brand's reach or merely repackages existing demand.

The first element that should shape household response is prelaunch audience overlap between the partner brands. By audience overlap, I mean the extent to which the same households were already purchasing both brands before the alliance existed. When overlap is very high, the brands are already drawing on a similar audience. In such cases, the alliance may still attract attention or increase intensity of purchasing, but its capacity to

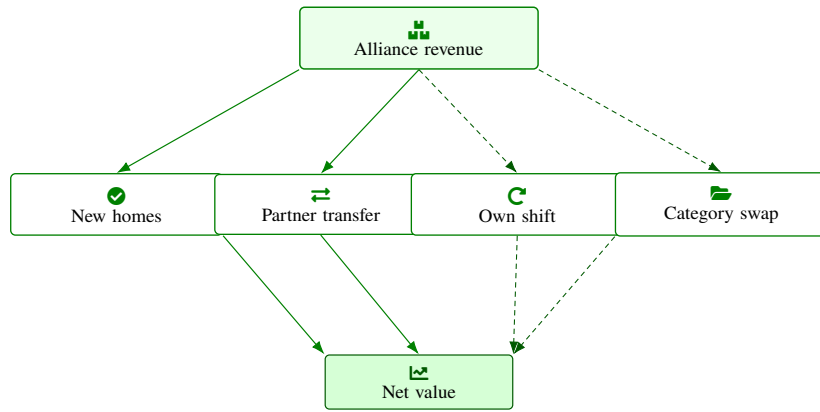


Figure 6 Observed alliance sales are decomposed into sources that differ in economic meaning. Revenue associated with genuinely new households or partner-side transfers can expand the franchise, whereas own-brand displacement and within-category substitution reduce the alliance’s net incremental contribution even when top-line launch volume looks strong.

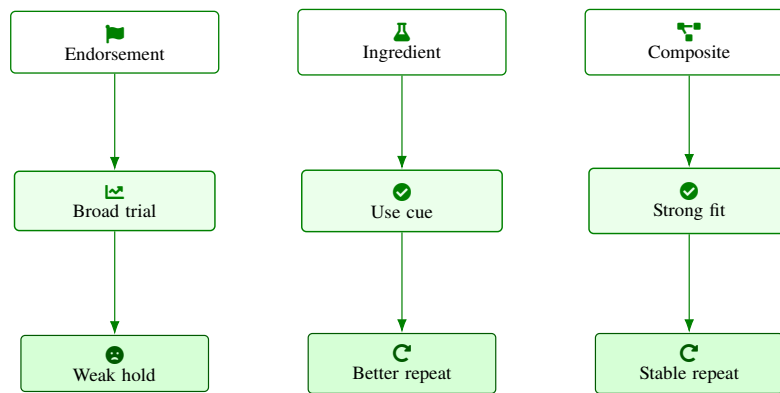


Figure 7 Alliance structure shapes retention as much as acquisition. Endorsement-oriented forms can stimulate initial trial through symbolic recognition, but ingredient-based and composite forms provide clearer product-level reasons to continue purchasing, making repeat behavior more stable after the first transaction.

bring in truly new households should be limited because the two repertoires are already intertwined [8]. A jointly branded cookie and cereal line sold to households that already purchase both brands separately can generate sales, yet much of that response is likely to come from buyers already inside one or both brands’ consumption sets.

At the other extreme, very low overlap can also be problematic. If the brands are too distant in household composition, the alliance may create curiosity without a stable usage rationale. The low-overlap pairing can recruit trial from households who are intrigued by the collision of unfamiliar repertoires, but those households may not return if the product does not fit their ordinary consumption patterns. In this sense, low overlap may be acquisition-rich and retention-poor. The alliance functions more as an interruption than as a bridge. Between the two extremes lies a more promising region. Moderate audience overlap implies that the brands share enough common interpretive ground to make the product credible, but not so much commonality that the alliance merely recycles the same households. The household-level prediction is therefore nonlinear: acquisition should be strongest at moderate overlap rather than at either boundary.

A second determinant of trial and retention is partner prominence asymmetry. Even when an alliance is coherent, the household may perceive one brand as carrying most of the interpretive weight. A strongly asymmetric alliance can be useful at trial because the dominant brand supplies recognition and reassurance quickly [9]. The weaker partner benefits from borrowed attention. Yet the same imbalance may weaken repeat purchase. Once the household has tried the product, the question is no longer whether the dominant brand can induce trial, but whether the product itself deserves a place in the household’s routine. If the weaker partner’s contribution appears ornamental or unclear, the first purchase may not convert into repetition. What initially looked like a persuasive cue can later look like an inflated promise. The household responds by returning to incumbent items or by continuing to buy the stronger partner elsewhere without maintaining the alliance product itself.

This logic is consistent with the more general observation that asymmetry can redistribute gains within alliances rather than simply increasing them. Yan and Cao (2017) show analytically that, when partner quality positions diverge, the lower-quality brand can benefit as the differential grows while the higher-quality brand bears a less favorable effect, with the stronger part-

ner's value from alliance improving as the quality gap narrows [10]. Translating that insight to a household setting suggests that heavily asymmetric pairings may perform differently on trial and retention. The stronger brand can pull households into the first purchase, but the underlying mismatch makes the relationship harder to stabilize over repeated trips. Put differently, asymmetry may be efficient at reducing trial uncertainty while being inefficient at generating a believable ongoing proposition.

A third determinant concerns the structure of the allied product itself [11]. Some alliances change the product materially. Others mainly decorate an existing host product with a secondary brand's meaning. This difference should matter because a household that repeats a purchase is validating not just the label but the experienced product. If the alliance adds a substantive ingredient, formula, or combined use occasion, the household has a concrete basis for repurchase. If the alliance is primarily endorsement oriented, the gap between pre-purchase attraction and post-purchase utility can be wider. In such cases, trial may be high but retention fragile. This distinction implies that acquisition and retention are not only functions of the partner brands but also of the depth with which the alliance enters the product itself.

The household's prior category status is equally important. Some households are category new, meaning they have not purchased in the host category over a defined prelaunch period. Others are category active but new to one partner. These groups are behaviorally different. Category-new households face higher search and interpretation costs [12]. An alliance can lower those costs because the secondary brand offers a transfer cue from a known repertoire. Yet category-new households also have less established usage frequency in the host category, so their probability of repeating may depend more heavily on whether the product creates a genuine new routine rather than a one-time experiment. Category-active households, by contrast, may be easier to retain because they already allocate spending to the host category. But some of their purchases are more likely to be substitution from incumbent items. The alliance therefore faces a trade-off between incremental reach and cannibalization risk.

A fourth mechanism concerns repertoire compatibility at the household level. Two brands can be judged as compatible in a general sense while still residing in very different shopping rhythms. One may be bought weekly, the other seasonally. One may be associated with indulgence, the other with a planned stock-up. When a household's usage tempo for the two brands is misaligned, the alliance can generate trial without regularization. That tempo issue is especially relevant in packaged-goods contexts where shopping frequency and pantry cycles differ sharply across categories. A household can like the idea of the alliance yet fail to rebuy simply because the product does not settle into a repeating trip pattern [13]. For this reason, the empirical design tracks not just whether households had bought the partner brands before launch, but also how recently and how frequently they had done so.

The arguments above imply that alliance performance should be decomposed into at least three behavioral transitions. The first is movement from nonpurchase to first purchase of the alliance. The second is movement from first purchase to repeat purchase.

The third is movement from alliance purchase to broader repertoire expansion, such as trying other items in the host category or buying adjacent categories associated with the partner brands. The value of the alliance depends on all three transitions, but they need not share the same determinants. Moderate audience overlap may maximize the first transition, while partner balance and substantive integration may be more important for the second. The third may be strongest among households who enter from adjacent categories through the secondary brand rather than among households already deeply invested in the primary brand.

These distinctions produce four empirical expectations. First, allied products should exhibit higher first-purchase incidence among category-new households than matched single-branded launches. Second, the alliance advantage in first purchase should be hump shaped in prelaunch partner-audience overlap, peaking at moderate overlap. Third, repeat purchase conditional on trial should be higher for alliances with more balanced partner prominence and with substantive rather than surface-level integration [14]. Fourth, the net incremental value of an alliance should depend on the source of demand. Volume drawn from category-new households and adjacent-category entrants should be more valuable than volume drawn from incumbent loyal households of the primary brand, because the latter is more likely to cannibalize existing products. These expectations are not conceptual abstractions for their own sake. They are directly estimable in household panels once the prelaunch repertoires of the partner brands have been observed.

3. Observed Households and Matched Products

The empirical analysis uses household-level scanner data covering grocery, drug, mass, and selected club channels in the United States from January 2010 through December 2021. The panel contains 71,842 households observed for at least three consecutive years, with demographic coverage broad enough to preserve variation in income, family structure, and shopping intensity. The product universe begins with all new consumer packaged goods introductions in twenty-eight narrowly defined categories where brand alliances occurred with sufficient frequency to support comparison. Products were included if they were launched nationally or in at least eight designated market areas, remained identifiable in scanner records through stable UPCs for a minimum of thirteen weeks, and were not simply temporary bundles or gift packs. After applying these filters, the final launch file contained 286 allied product introductions and 1,644 single-branded introductions available for matching.

The alliance sample was assembled from launch records, archived package images, trade descriptions, and contemporaneous retailer listings. A product qualified as an alliance when two autonomous brands appeared in the consumer-facing proposition and at least one of the brands could be connected to a prior independent product presence outside the focal launch. This definition excludes internal sublabels and temporary co-promotions without product-level identity [15]. The resulting sample spans snacks, frozen foods, breakfast products, con-

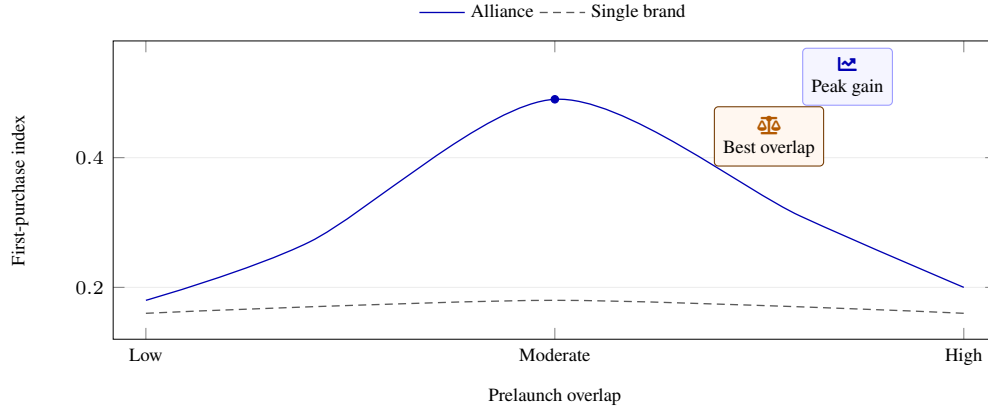


Figure 8 Alliance acquisition peaks at moderate prelaunch audience overlap, while the matched single-branded launch remains flatter and lower.

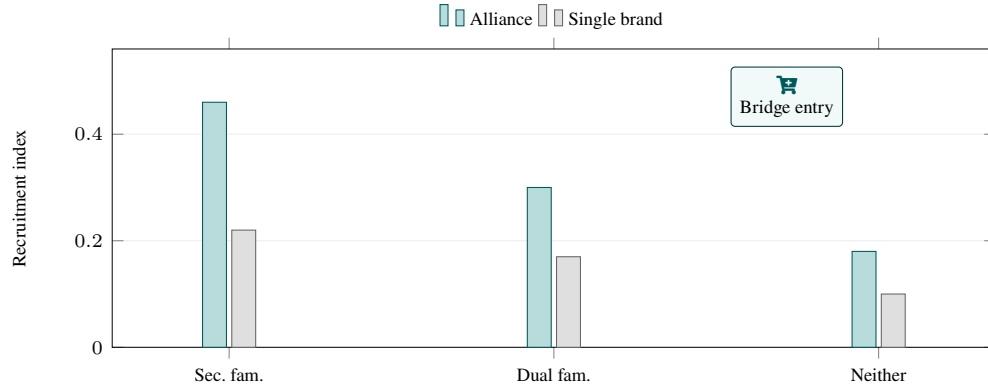


Figure 9 Category-new recruitment is strongest among households familiar with the secondary partner before launch.

fectionery, beverages, dairy-adjacent items, personal care, and several household categories. It includes ingredient-oriented products where the partner brand is visible as a substantive component, endorsement-oriented products where the partner lends symbolic meaning or cultural property, and composite products where both brands materially define the final offering.

The control sample of single-branded introductions was not drawn indiscriminately. Each alliance launch was matched to up to six single-branded introductions using a layered procedure. The first layer imposed exact matching on broad category family, package form, launch year, and whether the introducing firm belonged to the top half of category share. The second layer used nearest-neighbor matching on prelaunch brand presence, package-size position, and advertising intensity where observed. The third layer required that the control product not itself be tied to a temporary licensed property or a retailer-exclusive format that would alter its exposure conditions substantially. After these steps, the matched control group contained 1,244 unique products contributing 1,644 product matches, because some controls were matched to more than one alliance in distinct subcategories. Balance diagnostics showed close alignment on observed launch characteristics, with remaining standardized differences reduced further through inverse-probability weights used in the panel estimators.

The household side of the dataset was built around prelaunch

repertoires. For each partner brand and each control brand, household purchase histories were reconstructed over the fifty-two weeks preceding the focal launch. This allows several household states to be defined at launch [16]. A household is category new if it has not purchased in the host category during the prior year. It is primary-brand familiar if it has purchased a product carrying the primary brand outside the focal alliance. It is secondary-brand familiar if it has purchased the partner brand outside the focal alliance. It is dual familiar if both conditions hold. These states matter because an alliance can recruit from different origins, and those origins predict both repeat purchase and cannibalization. A category-new household entering through secondary-brand familiarity is not economically equivalent to a long-time primary-brand buyer shifting from an incumbent SKU into the alliance line.

The partner-audience overlap measure is built directly from these prelaunch household repertoires. Let brand j and brand k denote the two allied brands. For each brand, a household-incidence vector is formed over the panel, where the entry equals one if the household bought the brand in the prelaunch year and zero otherwise. Overlap is then measured using a normalized similarity score derived from these incidence vectors. Because some brands are much larger than others, the metric is scale adjusted rather than based on simple common-buyer counts. This gives a household-centered measure of how much the two brands

Table 1 Summary of Research Focus

Aspect	Description	Data Level	Outcome
Acquisition	First-time category entry	Household	Trial rate
Retention	Repeat purchase behavior	Household	Stability
Basket Expansion	Spending in adjacent categories	Trip/Period	Revenue growth
Cannibalization	Shift from incumbent products	Household	Net value

Table 2 Key Variables

Variable	Definition	Type
A_i	Alliance indicator	Binary
O_i	Audience overlap	Continuous
S_i	Prominence asymmetry	Continuous
B_i	Alliance form	Categorical

already share an audience before they ever appear together [17]. The resulting overlap variable varies substantially across the alliance sample, which is one reason the dataset is informative. Some alliances join brands whose prelaunch buyers barely intersect. Others join brands that are already common co-residents in the same households.

A separate variable captures partner prominence asymmetry. This measure combines household penetration, search salience, and category presence into a standardized index for each brand, then takes the absolute difference between the two partners. The point is not to decide which partner is objectively better, but to quantify how unbalanced the alliance signal is likely to look to the household. A small difference implies balanced visibility. A large difference implies that one brand is doing most of the signaling work. This variable later proves useful because it predicts whether trial translates into repeat purchase.

The launch sample also includes product-level coding of alliance structure. While the categories endorsement, ingredient, and composite are familiar in the alliance literature, the coding here is grounded in household-visible product features rather than in legal form alone. An endorsement alliance is one where the secondary brand mainly supplies symbolic association or thematic identity without changing the product's substantive consumption experience in a readily observable way [18]. An ingredient alliance is one where the partner brand corresponds to a named input, flavor system, or functional component that is likely to matter during use. A composite alliance is one where both brands contribute materially to the final proposition, such that the product is not simply a host item adorned with an external label. These distinctions are important because households repeat what they experience, not merely what they recognize.

Brand-level controls were added to ensure that audience overlap and prominence asymmetry were not proxies for broader

firm conditions. At the primary-brand level, the data include prelaunch category share, advertising intensity, total product-line breadth, and the brand's overall household penetration. At the secondary-brand level, the data include household penetration outside the host category, the number of active licensing or partnering contexts visible in the market, and a saturation count indicating how many distinct product lines currently use the partner brand. This latter control was included because partner-brand overuse can weaken the marginal meaning of the alliance signal. At the dyad level, the data include whether the pair had been observed together before in any form and whether the launch was explicitly marketed as limited-time or seasonal.

These dyad-level controls are motivated in part by earlier evidence that alliance outcomes depend on the distribution of brand resources across partners rather than on the focal firm alone. Cao and Yan (2017) show that a participating firm's brand value can influence both its own and its partner's financial return from a brand alliance [19], while brand-value differential and prior exploitation of the partner brand can weaken those gains. That observation is useful here because it suggests that household response should not be modeled using only the host product's characteristics. The condition of the borrowed brand and the asymmetry between the partners are likely to matter for household acquisition and stabilization as well [20]. The present data therefore track partner prominence and saturation explicitly rather than burying them inside residual variation.

The category environment was also measured in household terms. Each category-market-week includes private-label share, average category deal intensity, assortment breadth, and a concentration index for leading manufacturer brands. These contextual measures matter because an alliance entering a highly promotional category faces a different household choice environment than one entering a calmer aisle. The same alliance

Table 3 Alliance Forms

Form	Description	Retention Strength
Endorsement	Symbolic association	Low
Ingredient	Functional component	Medium
Composite	Joint product creation	High
Hybrid	Mixed structure	Medium-High

Table 4 Household Segments

Segment	Prelaunch Status	Behavior
Category-new	No prior purchase	High acquisition
Primary-loyal	Loyal to main brand	Cannibalization risk
Secondary-familiar	Knows partner brand	Strong bridge effect
Dual-familiar	Knows both brands	Fast trial

can recruit more households where the category is underdeveloped in household repertoires and fewer where households are already committed to low-priced habitual alternatives. Since households are observed across multiple categories, the data can also identify when the same household enters the host category through the alliance after previously purchasing the secondary brand in a neighboring category. Those patterns become central in the later decomposition of gains.

A final feature of the dataset deserves emphasis. The panel is long enough to track households for fifty-two weeks before launch and fifty-two weeks after first allied purchase, which makes it possible to distinguish true first-time adoption from short gaps in purchase timing. Repeat purchase is not defined mechanically as buying twice within a month. Instead it is measured over multiple windows and treated as a hazard rather than as a single binary outcome. That choice reflects the reality that alliances in packaged goods enter categories with very different purchase rhythms [21]. A weekly snacking item and a monthly pantry item should not be forced into the same fixed repeat interval. The hazard approach respects those differences while preserving a common conceptual distinction between trial and stabilization.

4. Modeling Acquisition Stabilization and Cannibalization

The empirical strategy is built around the idea that alliance value at the household level is a sequence of transitions rather than a single event. A household first decides whether to try the product at all. Conditional on trying, it then decides whether to repeat. Conditional on repeating or even after a single purchase, it may expand its basket into the host category or into adjacent categories associated with the partner brands. Some of the observed volume may also displace incumbent products already sold by the primary brand. The analysis therefore estimates four linked outcomes: first purchase, repeat purchase, basket

expansion, and cannibalization.

The first purchase model is estimated on households that did not buy the focal product before launch and is analyzed separately for category-new households and category-active households. Let F_{hit} indicate whether household h makes its first purchase of product i in week t after launch. The baseline discrete-time hazard model is

$$\Pr F_{hit} = 1 = \Lambda(\alpha_h \delta_{ct} \beta_1 A_i \beta_2 O_i \beta_3 O_i^2 \beta_4 A_i \times O_i \beta_5 A_i \times O_i^2 \beta_6 S_i \beta_7 B_i \mathbf{x}_{hit}^\top \beta_8), \quad (4.1)$$

where $\Lambda \cdot$ is the logistic link, A_i indicates that the product is allied rather than single branded, O_i is prelaunch partner-audience overlap, S_i is partner prominence asymmetry, B_i is a vector of alliance-form indicators, α_h is a household effect, δ_{ct} is a category-by-week effect, and $\mathbf{x}_{hit}$ contains household shopping intensity, local distribution, price, and promotion controls. The quadratic terms allow acquisition to respond nonlinearly to overlap. Since the controls include realized retail availability, the alliance coefficient is not merely picking up differential distribution at the week level [22].

The second outcome is repeat purchase. Let $R_{hi\tau}$ denote whether household h , having made a first purchase of product i , buys it again in duration interval τ . The repeat hazard is estimated as

$$\Pr R_{hi\tau} = 1 = \Lambda(\mu_h \kappa_\tau \gamma_1 A_i \gamma_2 S_i \gamma_3 A_i \times S_i \gamma_4 O_i \gamma_5 Comp_i \gamma_6 Inged_i \gamma_7 Z_{hi}^{first} \mathbf{w}_{hi\tau}^\top \gamma_8), \quad (4.2)$$

Table 5 Overlap Effects

Overlap Level	Acquisition	Retention	Outcome
Low	Moderate	Weak	Fragile trial
Moderate	High	Strong	Optimal
High	Low	Moderate	Saturation
Very High	Minimal	Stable	Cannibalization

Table 6 Prominence Asymmetry Impact

Asymmetry Level	Trial Effect	Repeat Effect
Low	Neutral	Strong
Moderate	Positive	Moderate
High	Strong	Weak
Very High	High	Negative

where κ_τ is a flexible baseline duration effect, $Comp_i$ and $Ingred_i$ identify composite and ingredient alliances with endorsement as the omitted alliance form, Z_{hi}^{first} includes first-purchase basket composition and whether the purchase occurred on deal, and $w_{hi\tau}$ includes time-varying price, promotion, and availability. This model treats repeat purchase as a stabilization outcome that can differ from trial in its determinants. If prominence asymmetry mainly helps first purchase but hurts repeat, the sign pattern will be visible here.

Basket expansion is modeled at the trip level. For a household that buys the focal product, let Y_{hig} denote expenditure in adjacent category set g on the same trip or within the same four-week period, depending on the specification. The adjacent category set is built from the historical purchasing adjacency of the partner brands. The model is

$$Y_{hig} = \theta_h \psi_{gt} \pi_1 A_i \pi_2 NewCat_{hi} \pi_3 A_i \times NewCat_{hi} \pi_4 O_i \pi_5 S_i \mathbf{q}_{hig}^\top \boldsymbol{\pi}_6 \epsilon_{hig}, \quad (4.3)$$

where $NewCat_{hi}$ indicates that household h was category new prior to purchasing product i . This outcome helps distinguish alliances that broaden the household's commercial footprint from those that simply concentrate spending within the focal SKU.

Cannibalization requires a different decomposition because not all alliance volume is incremental. For households already buying the primary brand in the host category, the alliance may displace incumbent SKUs. The core decomposition writes observed alliance revenue as the sum of genuinely new revenue, partner-transfer revenue, and displaced own-brand revenue. Let Rev_{hi}^A denote postlaunch revenue from the alliance for household h , and let ΔRev_{hi}^P denote the change in revenue from the

primary brand's incumbent host-category products. Net incremental alliance revenue at the household level is [23]

$$NIV_{hi} = Rev_{hi}^A \Delta Rev_{hi}^{Adj} - (-\Delta Rev_{hi}^P) - \Delta Rev_{hi}^{CatSub}, \quad (4.4)$$

where ΔRev_{hi}^{Adj} is the change in adjacent-category revenue attributable to the alliance trip pattern and ΔRev_{hi}^{CatSub} captures substitution away from nonprimary items in the same category. Since this quantity is not directly observed, it is estimated using matched prelaunch-postlaunch spending paths and household fixed effects. The purpose is not to claim perfect structural identification of counterfactual household behavior, but to obtain a disciplined decomposition of where postlaunch dollars appear to come from.

Several measurement choices are central. Audience overlap O_i is defined from a household-brand incidence matrix. Let $\mathbf{m}_j$ and $\mathbf{m}_k$ be the prelaunch incidence vectors for the two partner brands. Then

$$O_i = \frac{\mathbf{m}_j^\top \mathbf{m}_k}{\|\mathbf{m}_j\|_2 \|\mathbf{m}_k\|_2}. \quad (4.5)$$

This cosine-style overlap measure is bounded and robust to differences in brand scale. A value near one indicates highly shared audiences, while a value near zero indicates largely separate households. Prominence asymmetry S_i is built from standardized household penetration and salience indicators. Let P_j and P_k denote the partner-specific composite prominence scores. Then

$$S_i = |\log P_j - \log P_k|. \quad (4.6)$$

Table 7 Performance Metrics

Metric	Alliances	Single-brand
First Purchase	Higher	Lower
Repeat Purchase	Mixed	Stable
Basket Expansion	Higher	Lower
Cannibalization	Higher variance	Lower

Table 8 Revenue Decomposition

Source	Share (%)	Value Type
Category-new	44.3	Incremental
Partner-transfer	18.9	High value
Own-brand shift	31.4	Internal
Other substitution	Remaining	Neutral

Higher values indicate a more one-sided alliance signal.

Because household panels are highly unbalanced in shopping frequency, the models include household effects and category-by-time effects wherever possible. In the first-purchase hazard, household effects absorb stable propensities to shop heavily or experiment broadly. In the repeat hazard, household effects absorb differences in general repeat tendency across consumption styles [24]. Category-by-time effects absorb seasonality, macro shocks, and broad promotional conditions in the aisle. Standard errors are clustered at the product level and the household level using two-way clustering where the estimator permits. For the cannibalization decomposition, bootstrapped confidence intervals are reported because the measure is constructed from multiple estimated components.

A further complication is that alliance products may be distributed differently from controls in ways that are endogenous to expected demand. Rather than treating distribution as exogenous, the main purchase models condition on realized store coverage at the household-market-week level. In supplemental specifications, a control-function approach is used where distribution intensity is first predicted from retailer authorization calendars, chain-specific category reset timing, and prelaunch firm presence, then the residual is included in the purchase equations. The alliance effects remain stable under this adjustment, which reduces concern that observed acquisition differences merely reflect privileged access rather than household response to the alliance itself.

The models also allow for dynamic heterogeneity by household origin. The acquisition hazard is estimated separately for category-new households, for category-active households unfamiliar with the secondary brand, and for households already familiar with both brands. This split reveals whether the alliance is genuinely opening the category or mainly intensifying demand among already overlapping households. Likewise, repeat models are estimated separately for households whose first al-

lied purchase occurred on deal and those whose first purchase occurred at regular price. This matters because a deal-driven first purchase may imply weaker stabilization even if the alliance effect on trial is strong [25].

The final modeling choice is to summarize household movement through a transition matrix that is estimated rather than imposed. Each household is assigned to one of four states with respect to the focal launch: outside the category, trial-only, repeated allied buyer, or reverted incumbent buyer. The one-step transition matrix for product i is

$$\mathbf{T}_i = \begin{bmatrix} t_{11} & t_{12} & t_{13} & t_{14} \\ t_{21} & t_{22} & t_{23} & t_{24} \\ t_{31} & t_{32} & t_{33} & t_{34} \\ t_{41} & t_{42} & t_{43} & t_{44} \end{bmatrix}, \quad (4.7)$$

with each row summing to one. The transition probabilities are estimated from observed household paths and then related back to overlap, prominence asymmetry, and alliance form. This matrix view provides a compact way to describe whether the alliance primarily converts outside households into stable buyers, or whether it mostly induces trial and then reversion to incumbent products. It is a descriptive tool rather than a full structural model, but it helps connect the separate hazards and revenue decompositions.

5. What the Data Show

The descriptive patterns already indicate that alliances and matched single-branded launches are not bringing in the same households. In the first thirteen weeks after launch, allied products obtain a higher raw incidence of first purchase among category-new households, but they also display greater heterogeneity in who those households are. Some alliances re-

Table 9 Transition Outcomes

State Transition	Likelihood	Interpretation
Outside → Trial	High	Entry effect
Trial → Repeat	Variable	Stability
Trial → Revert	Moderate	Weak fit
Repeat → Expand	Low-Moderate	Growth

Table 10 Key Findings

Finding	Evidence	Implication
Alliances boost acquisition	+16.8% trial	Entry tool
Moderate overlap optimal	Peak at 0.43	Target pairing
Asymmetry harms retention	-5.9 pts repeat	Balance needed
Integration improves repeat	+9.4%	Product depth matters

cruit heavily from households that had recently bought the secondary brand in another category. Others recruit mostly from households already active in the host category through the primary brand. This heterogeneity explains why simple averages are not very informative [26]. The central question is not whether alliances outperform controls on average, but under what household-composition conditions they do so.

The baseline acquisition model shows that, among category-new households, alliance products have a materially higher probability of first purchase than matched single-branded launches. Converting the logistic coefficient to an average marginal effect, the alliance indicator raises weekly first-purchase probability by 16.8% relative to the matched control baseline, holding observed price, promotion, distribution, and household shopping intensity constant. The estimate is precise and remains in a narrow band across alternative specifications with control-function adjustments for distribution. This is the first major result. Alliances do appear to function as category-entry devices for households that were previously absent from the aisle.

The second major result is the nonlinearity in audience overlap. The linear overlap term is positive and the quadratic term negative within the alliance sample, with the implied acquisition maximum at an overlap score close to 0.43. This means that alliances whose partner brands share neither too little nor too much of their prelaunch audience recruit the most category-new households. When overlap is very low, first purchase is still above matched controls, but the lift is smaller and less persistent. When overlap is very high, the alliance continues to sell, but less of the volume comes from category-new households. In other words, moderate overlap is the zone where the alliance most effectively expands the household boundary of the category rather than recycling an already shared customer base [27].

This pattern remains visible when the sample is split by household origin. For households previously familiar with the secondary brand but absent from the host category, the acquisition

effect is strongest and most clearly hump shaped in overlap. These households seem to use the alliance as a bridge. They already trust or recognize the secondary brand, and the alliance lowers the friction of entering the host category under the primary brand's umbrella. By contrast, among households already familiar with both brands, the alliance effect on first purchase is flatter and more concentrated in high-overlap pairs. That makes intuitive sense. When households already buy both brands, the alliance acts less as a category bridge and more as a new option within an existing shared repertoire.

Prominence asymmetry produces a different pattern. In the acquisition equation, the main effect of asymmetry is modestly positive for category-new households, implying that a dominant partner can help trigger the first purchase. The effect is not large, but it is consistent across specifications. However, once the analysis moves to repeat purchase, the sign reverses. Among trial households, prominence asymmetry lowers the probability of a second purchase within twenty-six weeks [28]. The average marginal effect is economically meaningful: moving from the twenty-fifth percentile to the seventy-fifth percentile of asymmetry reduces repeat probability by roughly 5.9 percentage points for the average allied product. This is strong evidence that the households recruited by a highly unbalanced alliance are less likely to stabilize.

The repeat hazard sharpens this result. Conditional on first purchase, alliance products are not uniformly more likely to be rebought than matched single-branded launches. The average alliance effect on repeat is positive but modest. What drives the variation is form and balance. When the alliance is composite or ingredient based and the prominence asymmetry is below the median, repeat purchase probability rises by 9.4% relative to controls. When the alliance is endorsement oriented and prominence asymmetry is high, repeat purchase falls below the matched-control baseline by 4.1%. Thus alliances are not generically sticky. Some are more efficient at generating trial

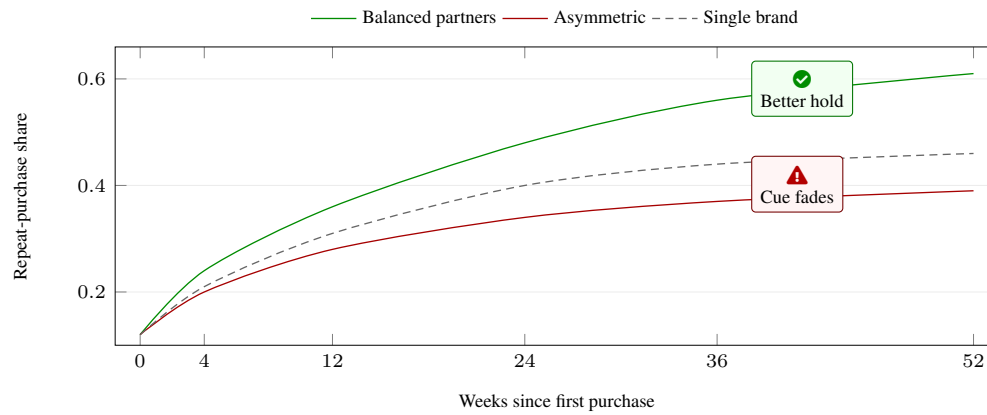


Figure 10 Balanced partner prominence produces stronger repeat purchase over time than heavily asymmetric alliances.

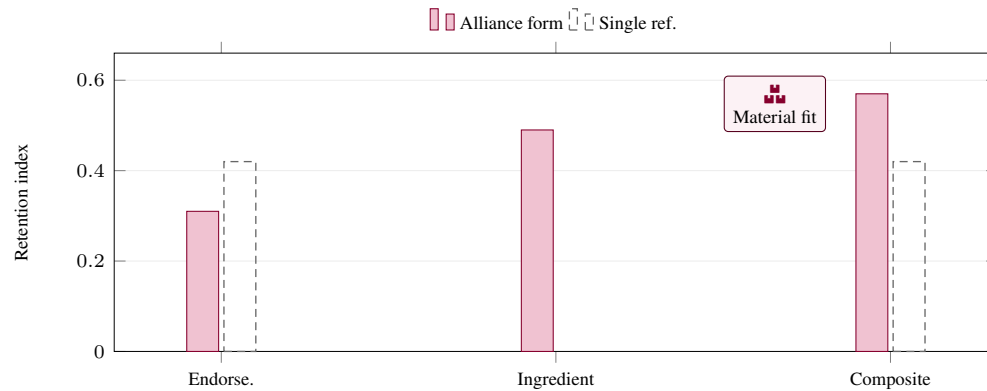


Figure 11 Composite and ingredient structures retain households better than endorsement-oriented launches.

than at converting that trial into routine.

The distinction across alliance forms is especially striking. Composite alliances recruit slightly fewer category-new households than endorsement alliances at launch, but they retain them more effectively [29]. Ingredient alliances lie between the two extremes, performing well when the named component plausibly changes the consumption experience. The structural split is consistent with Cao (2012), who distinguishes endorsement, ingredient, and composite configurations and finds that the financial consequences differ across these forms, with composite arrangements associated with stronger rewards [30]. The household-level evidence here points in the same direction through a different mechanism. Deeper integration does not always maximize trial, but it is more likely to generate repeat and therefore more likely to convert the alliance from an attention device into a durable household routine.

The transition matrix estimates summarize these dynamics neatly. For endorsement alliances in the top quartile of prominence asymmetry, the estimated transition from outside-category to trial-only is relatively high, but the transition from trial-only to repeated allied buyer is weak, and the transition from trial-only to reverted incumbent buyer is correspondingly larger. For balanced composite alliances, the transition from outside-category to trial-only is smaller, yet the transition from trial-only to repeated allied buyer is markedly stronger. This means that the

same total first-year volume can emerge from very different behavioral structures. One alliance is fueled by broad but shallow trial. Another is fueled by narrower but more stable adoption. The long-run value of those two paths is unlikely to be the same.

The basket-expansion results help explain why some retained households matter more than others [31]. Among category-new households, a first allied purchase is associated with a 6.7% increase in spending on adjacent categories in the same four-week window relative to matched controls. This increase is concentrated in households that enter through secondary-brand familiarity, suggesting that the alliance is not merely inserting one SKU into the basket. It is widening the household's purchase footprint around the new product. By contrast, among households already loyal to the primary brand, the adjacent-category expansion effect is small and sometimes negative, which suggests a substitution pattern rather than a broader expenditure response.

The cannibalization decomposition confirms that distinction. For households that purchased the primary brand in the host category during the prelaunch year, approximately 31.4% of alliance revenue appears to come from displacement of incumbent primary-brand SKUs over the next twenty-six weeks. For category-new households, the comparable estimate is only 8.2%. For households entering through secondary-brand familiarity, the displacement of incumbent primary-brand volume is modest

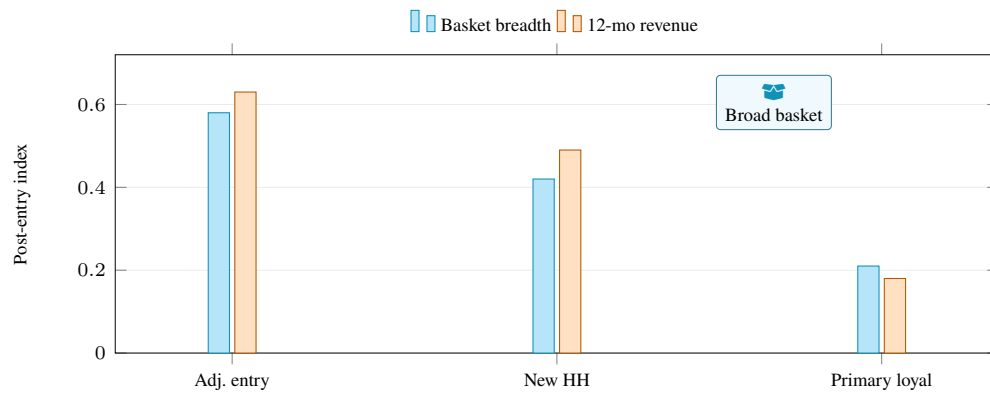


Figure 12 Entrants from adjacent repertoires generate broader baskets and stronger twelve-month revenue than primary-brand loyal households.

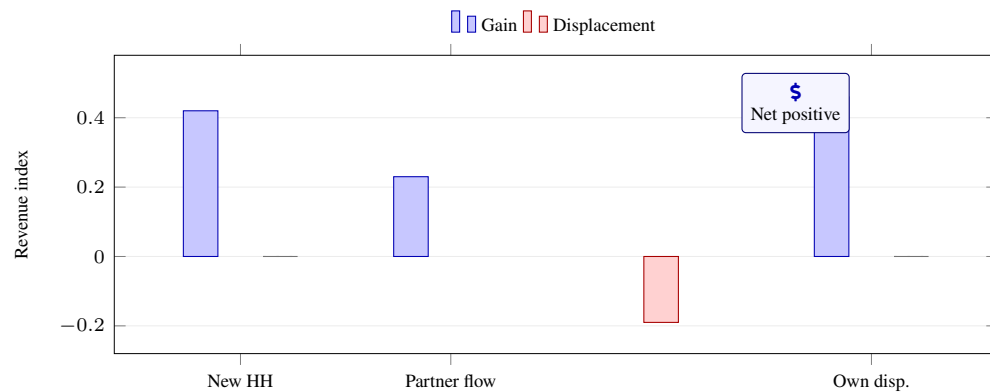


Figure 13 New-household gains and partner-transfer gains remain positive after accounting for own-brand displacement.

while incremental adjacent-category revenue is relatively large. This is one of the most practically important findings in the paper. The source of alliance volume determines its quality. A dollar from a category entrant who broadens the basket is not equivalent to a dollar from a loyal primary-brand buyer who shifts from one SKU to another.

These results remain stable under a variety of checks [32]. The acquisition hump in overlap is still visible when the overlap metric is replaced with a Jaccard-style common-buyer measure rather than the cosine measure. The asymmetry penalty in repeat remains when prominence is measured using household penetration alone rather than the composite index. The form differences remain when limited-time products are excluded. The broad picture therefore does not depend on one narrow specification choice. Alliances do recruit more category-new households, but the recruitment effect peaks at moderate audience overlap, and the retention of those households depends strongly on whether the alliance is balanced and substantively integrated.

A further result concerns first-purchase deal status. When households first buy an alliance on deep promotion, the repeat advantage of ingredient and composite forms weakens substantially. The product still outperforms matched controls in acquisition, but the stabilization rate declines. This is not surprising, yet it matters because it shows that household response to the alliance is not independent of launch pricing. A strong jointly branded proposition can still underperform in retention if the first pur-

chase is framed as a bargain rather than as a justified premium. The negative effect of deal-driven first purchase is largest for endorsement alliances, which again suggests that shallow symbolic integration is more vulnerable to a mismatch between message and transaction.

The temporal pattern of repeat is also informative [33]. The hazard of second purchase is highest in the first ten weeks after trial for all products, but the drop-off is much steeper for high-asymmetry endorsement alliances than for balanced ingredient or composite alliances. By week twenty, the survivor function for repeated purchase among balanced composite alliances remains noticeably above that of matched controls, whereas the endorsement curve has largely converged to or fallen below the control trajectory. This pattern indicates that retention is not just a binary matter of whether repeat occurs at all. The timing of re-engagement differs as well, with deeper alliances converting trial more quickly and more reliably into routine.

One could ask whether the alliance advantage in acquisition simply reflects bigger advertising campaigns or stronger launch support. The models control for observed advertising intensity and realized in-store promotion, and the alliance effect remains. More importantly, the effect is strongest in the household groups where a bridge mechanism is most plausible, namely category-new households already familiar with the secondary brand. That pattern would be unlikely if the result were driven solely by generic launch intensity. It appears that the household is using

the partner brand as a credible route into a new category. Where that route already exists because both brands share the same households, the incremental acquisition effect is smaller. Where the route is too tenuous because the audiences barely overlap, the bridge is weaker. The data therefore fit the proposed mechanism rather well [34].

6. Where the Gains Actually Go

The main results show that alliances differ in how they recruit and retain households. The next step is to translate those differences into a more explicit accounting of where the economic gains come from. Aggregate sales can rise because the alliance adds genuinely new households, because it shifts households from competitors, because it shifts households from the firm's own products, or because it increases the value of the whole basket on shopping trips involving the alliance. These components have different implications for future value. A household gained from outside the category changes the firm's reach. A household shifted from one of the firm's own SKUs mainly changes the composition of internal sales. A household that adds adjacent-category purchases may matter beyond the focal line. The decomposition therefore focuses on origin of demand rather than on volume alone.

The first element is category-new recruitment. Across the alliance sample, category-new households account for 44.3% of first-year alliance revenue, compared with 27.6% for matched single-branded launches. This is a substantial gap. It indicates that alliances are doing something different from ordinary new products in terms of who they attract [35]. Yet the aggregate share conceals variation. In alliances with audience overlap near the estimated optimum and prominence asymmetry below the median, category-new households contribute more than half of first-year revenue. In alliances combining very low overlap with very high asymmetry, the share falls sharply. The alliance still sells, but more of the sales come from households already inside one partner's orbit, especially the primary brand's.

The second element is partner-transfer demand, meaning purchases from households that were familiar with the secondary brand but not the primary brand or the host category before launch. These households are especially interesting because they represent the most direct bridge effect. On average, they account for 18.9% of first-year alliance revenue, but the number rises above 25% in categories where the secondary brand has strong adjacency to the host usage context. Their retention profile is also stronger than that of purely curious new households with no prior familiarity to either brand. In other words, the alliance seems most effective when it transports households from a known secondary-brand repertoire into a plausible host-category usage rather than when it attempts to persuade an entirely unconnected household through novelty alone.

The third element is own-brand displacement. Among households that had purchased the primary brand in the host category before launch, a meaningful share of alliance revenue appears to come from migration away from incumbent primary-brand products rather than from incremental category growth. The average displacement estimate of 31.4% was already noted, but

the distribution is what matters [36]. In the top quintile of audience overlap, own-brand displacement rises further because the alliance is drawing from a population already deeply embedded in the primary brand's customer base. This is not necessarily harmful. A firm may prefer internal migration if the alliance carries a higher margin or better strategic positioning. However, it means that the observed sales should not be read automatically as household expansion. The decomposition helps separate those cases.

A useful summary statistic is net incremental value at the household level, defined as alliance revenue plus adjacent-category basket expansion minus own-brand displacement and estimated same-category substitution. Averaged over the first year, the mean net incremental value of alliance launches exceeds that of matched single-branded launches by 11.2%. This is the headline net result, but it is uneven. Alliances in the top decile of prominence asymmetry combined with the bottom decile of audience overlap exhibit negative net incremental value relative to matched controls. These launches recruit some households, but not enough of the right kind, and too much of the volume comes from own-brand shifting or short-lived curiosity. By contrast, alliances with moderate overlap, moderate or low asymmetry, and substantive integration produce strongly positive net incremental value driven by category entrants and broader baskets.

The basket component is not trivial [37]. For households entering through secondary-brand familiarity, the alliance increases spending in adjacent partner-relevant categories by 9.1% over the subsequent twelve weeks relative to matched controls. This suggests that the alliance can change not only what the household buys inside the host category but also the path through which the household navigates neighboring categories. The effect is weakest among households already loyal to the primary brand and strongest among households who were previously outside the host category but active in an adjacent one. This pattern implies that the alliance can reconfigure household repertoire adjacency, at least for a period after launch. It is a broader phenomenon than SKU trial alone.

One of the more revealing additional analyses tracks whether allied-household revenue persists beyond the focal product. For households who bought the alliance and then lapsed from the allied SKU, some continued to buy the primary brand elsewhere in the host category. Others continued to buy the secondary brand in its original category. A small but meaningful share kept both behaviors. This means that even when the alliance itself does not hold the household indefinitely, it can still alter cross-category incidence. The effect is strongest for balanced ingredient and composite alliances, where the product experience provides a clearer reason for the household to connect the partner brands in future trips. For endorsement alliances, by contrast, lapse is more likely to end in simple reversion rather than in sustained cross-category broadening [38].

These findings help clarify the relationship between acquisition and stabilization. Acquisition alone is not a sufficient guide to household value. Some alliances achieve large category-entry effects because the partner brand supplies a vivid entry cue, but those entrants lapse quickly and contribute little adjacent-category expansion. Other alliances recruit fewer entrants yet

retain them more effectively and produce broader repertoires. The revenue decomposition shows why that distinction matters. The former pattern generates shallow spikes in net incremental value. The latter produces smaller but more durable gains. A manager focusing only on launch penetration might prefer the former. A manager concerned with twelve-month household value would not necessarily do so.

There is also evidence that household income and shopping intensity moderate the composition of gains. Lower-frequency shopping households are more likely to respond to strong secondary-brand familiarity at trial, but they are also more likely to lapse unless the alliance is substantively integrated. Higher-frequency shopping households are less susceptible to pure symbolic draws and more responsive to meaningful product integration [39]. Income heterogeneity is milder than shopping-frequency heterogeneity, though higher-income households show slightly higher repeat for balanced composite alliances. These moderations do not overturn the main results, but they show that acquisition and retention are filtered through household capability to absorb the new product into routine.

The decomposition also addresses a possible objection: perhaps alliances appear incremental only because they are observed in categories with broader household growth opportunities. To examine this, the net incremental value models were re-estimated within mature categories and within categories with low overall new-household growth. The relative advantage of alliances remains, though it narrows. More importantly, the same pattern of overlap and asymmetry persists. Moderate-overlap balanced alliances outperform others even where the category itself is not growing quickly. That result supports the interpretation that the alliance effect is not merely a by-product of entering fast-expanding categories. It is related to how the partnered brands map onto household repertoires.

Another informative result concerns households already purchasing both brands before launch. One might expect such dual-familiar households to be the most valuable because they are naturally predisposed to the alliance. In fact, they are mixed [40]. They contribute sizable early volume, but much of that volume reflects portfolio consolidation rather than expansion. Their baskets are already broad, so the alliance adds relatively little adjacent-category spending. Repeat is reasonable, but net incremental value is lower than for the partner-transfer households who enter from the secondary brand's repertoire into the host category. This means that the alliance's most economically productive households are not necessarily the most obvious ones. Familiarity with both brands creates fast uptake, yet it does not guarantee the most valuable expansion.

If one steps back, the household-level picture is coherent. Alliances work best when they do not try to force a union between entirely disconnected audiences, and when they do not simply overlay a weak product on top of an overpowering brand cue. They are most productive when they bridge partially connected repertoires, recruit households from adjacent usage contexts, and then give those households a product experience strong enough to support repetition. In that configuration, the alliance changes both category incidence and broader basket structure. Outside that configuration, the alliance is more likely to generate

short-lived trial or internal portfolio reshuffling.

7. Conclusion

This paper has examined brand alliances from the standpoint of household composition rather than from announcement response, store-level placement, or aggregate sales alone. The evidence shows that alliances do recruit more category-new households than comparable single-branded launches, but that gain is not monotonic in how the partner brands relate to one another [41]. Recruitment is strongest when the brands share a moderate prelaunch audience overlap, suggesting that the alliance is most effective when it functions as a bridge between repertoires that are connected but not already merged. Repeat purchase follows a different logic. It depends less on simple access to new households and more on whether the alliance is balanced in prominence and substantive enough in product structure to survive beyond first purchase.

The analysis also shows that household origin matters for the economic interpretation of alliance volume. Revenue from category entrants and adjacent-category transfers is more incremental than revenue drawn from incumbent primary-brand buyers. Some alliances look successful in raw sales terms while generating considerable own-brand displacement. Others recruit fewer households but create stronger twelve-month value because the recruited households stay, broaden their baskets, and continue to engage with one or both brands after the initial trial. Those differences are not visible in launch totals alone.

The broader implication is that brand-alliance evaluation should separate acquisition from stabilization and should ask where recruited households came from before deciding that an alliance expanded demand. A jointly branded product can be commercially useful without being deeply incremental, and it can be deeply incremental without producing the largest immediate spike in volume. The household lens developed here helps distinguish those cases. In consumer packaged goods markets, the most durable alliances appear to be those that bridge partially overlapping audiences, avoid excessive prominence imbalance, and give the household a reason to come back after the first purchase [42].

Acknowledgments

We would like to thank the reviewers of this research for their helpful comments and suggestions.

References

- [1] A. Szymoszkowskyj, M. Winand, D. Kolyperas, and L. Sparks, "Professional football clubs retail branding strategies," *Sport, Business and Management: An International Journal*, vol. 6, pp. 579–598, 11 2016.
- [2] N. Singh, "Co-branding : Euphoria of brand alliance," *Review of Professional Management- A Journal of New Delhi Institute of Management*, vol. 11, pp. 52–57, 12 2013.
- [3] O.-Y. Kwon and K.-M. Kim, "Consumers' evaluation on extended brand products by international brand alliance,"

- INTERNATIONAL BUSINESS REVIEW*, vol. 6, pp. 23–, 6 2002.
- [4] Z. Cao and A. Sorescu, “Wedded bliss or tainted love? stock market reactions to the introduction of cobranded products,” *Marketing Science*, vol. 32, no. 6, pp. 939–959, 2013.
 - [5] B. S. Gammoh, K. E. Voss, and X. Fang, “Multiple brand alliances: a portfolio diversification perspective,” *Journal of Product & Brand Management*, vol. 19, pp. 39–39, 3 2010.
 - [6] M. A. ur Rehman, “Clarifying the brand orientation construct for business-to-business sector,” *International Journal of Business and Management*, vol. 9, pp. 62–, 11 2014.
 - [7] W. Kucharska, “Consumer social network brand identification and personal branding. how do social network users choose among brand sites,” *Cogent Business & Management*, vol. 4, pp. 1315879–1315879, 1 2017.
 - [8] N. Hmelkova, “Influence of co-branding on the brand equity,” *Journal of Russian Entrepreneurship*, vol. 12, pp. 84–88, 6 2011.
 - [9] A. Smith, “Tourists’ consumption and interpretation of sport event imagery,” *Journal of Sport & Tourism*, vol. 11, pp. 77–100, 11 2006.
 - [10] R. Yan and Z. Cao, “Is brand alliance always beneficial to firms?,” *Journal of Retailing and Consumer Services*, vol. 34, pp. 193–200, 2017.
 - [11] A. Krasnikov, S. Mishra, and D. Orozco, “Evaluating the financial impact of branding using trademarks: A framework and empirical evidence,” *Journal of Marketing*, vol. 73, pp. 154–166, 11 2009.
 - [12] M. Rahman, “Differentiated brand experience in brand parity through branded branding strategy,” *Journal of Strategic Marketing*, vol. 22, pp. 603–615, 5 2014.
 - [13] V. Lavallée-Picard, “Planning for food sovereignty in canada? a comparative case study of two rural communities,” *Canadian Food Studies / La Revue canadienne des études sur l’alimentation*, vol. 3, pp. 71–95, 4 2016.
 - [14] B. L. Simonin and J. A. Ruth, “Is a company known by the company it keeps? assessing the spillover effects of brand alliances on consumer brand attitudes,” *Journal of Marketing Research*, vol. 35, pp. 30–42, 2 1998.
 - [15] S. Baxter and J. Ilicic, “Three’s company: Investigating cognitive and sentiment unit imbalance in co-branding partnerships,” *Journal of Brand Management*, vol. 22, pp. 281–298, 4 2015.
 - [16] L. C. Ueltschy, “Global supply chain management: Is sustainability a priority?,” *Journal of Business Case Studies (JBSCS)*, vol. 7, pp. 17–22, 8 2011.
 - [17] S. Bresciani and M. J. Eppler, “Brand new ventures? insights on start-ups’ branding practices,” *Journal of Product & Brand Management*, vol. 19, pp. 356–366, 8 2010.
 - [18] A. R. Rao, “Strategic brand alliances,” *Journal of Brand Management*, vol. 5, pp. 111–119, 11 1997.
 - [19] Z. Cao and R. Yan, “Does brand partnership create a happy marriage? the role of brand value on brand alliance outcomes of partners,” *Industrial Marketing Management*, vol. 67, pp. 148–157, 2017.
 - [20] S. kyoung Ahn, “Attitude transfer model in fashion co-marketing alliance: Controlling product tangibility/intangibility,” *Journal of Fashion Business*, vol. 15, pp. 142–155, 7 2011.
 - [21] L. A. Joia and R. Malheiros, “Evidências empíricas da influência de alianças estratégicas no capital intelectual de empresas,” *Base – Revista de Administração e Contabilidade da Unisinos*, vol. 7, pp. 162–177, 6 2010.
 - [22] A. T. Kraja, M. A. Province, R. J. Straka, J. M. Ordovas, I. B. Borecki, and D. K. Arnett, “Fenofibrate and metabolic syndrome,” *Endocrine, metabolic & immune disorders drug targets*, vol. 10, pp. 138–148, 6 2010.
 - [23] S. E. Andersen and C. Stage, “Consumption that matters,” *MedieKultur: Journal of media and communication research*, vol. 26, pp. 20–, 11 2010.
 - [24] S. Y. Saleh, K. A. Attia, M. A. Fouad, and M. M. Nassar, “Effects of multi-enzyme feed additive “kemzyme” or/and sodium bentonite “as a feed binder” on sexual activity and some fertility parameters of rabbit bucks,” *Journal of Agricultural Science*, vol. 2, pp. 89–99, 11 2010.
 - [25] S. Doyle, “Software review: Which part of my marketing spends really works? — marketing mix modelling may have an answer,” *Journal of Database Marketing & Customer Strategy Management*, vol. 11, pp. 379–385, 7 2004.
 - [26] T. Riley, “McDonald’s on the move: Restaurants and interstate highway system meet the needs of a newly mobile nation,” *Transportation Builder*, vol. 17, 11 2005.
 - [27] N. Papadopoulos, A. E. Banna, and S. A. Murphy, “Old country passions: An international examination of country image, animosity, and affinity among ethnic consumers,” *Journal of International Marketing*, vol. 25, pp. 61–82, 9 2017.
 - [28] A. Datta, R. Reed, and L. Jessup, “Commercialization of innovations: an overarching framework and research agenda,” *American Journal of Business*, vol. 28, pp. 147–191, 10 2013.
 - [29] M. Lemanowicz, “Rola promocji w kreowaniu wizerunku regionu - instrumenty, narzędzia, trendy. przykład województwa świętokrzyskiego,” *Zeszyty Naukowe SGGW, Polityki Europejskie, Finanse i Marketing*, pp. 86–101, 12 2017.

- [30] Z. Cao, *An empirical examination of stock market reactions to introduction of co-branded products*. PhD thesis, 2012.
- [31] F. Mosca and C. Civera, “The evolution of csr: An integrated approach,” *Symphonya. Emerging Issues in Management*, pp. 16–35, 12 2017.
- [32] L. Victorino, R. Verma, G. Plaschka, and C. S. Dev, “Service innovation and customer choices in the hospitality industry,” *Managing Service Quality: An International Journal*, vol. 15, pp. 555–576, 12 2005.
- [33] B. S. Gammoh and K. E. Voss, “Brand alliance research: In search of a new perspective and directions for future research,” *Journal of Marketing Development and Competitiveness*, vol. 5, pp. 81–93, 6 2011.
- [34] A. S. A. Belmonte, “Relationship marketing: como uma estratégia de co-branding pode ser relevante numa abordagem relacional ao mercado — o caso nike+,” *Comunicação pública*, pp. 73–95, 12 2009.
- [35] J. C. Marshall, “More than meets the eye,” *Nature*, vol. 396, pp. 36–36, 11 1998.
- [36] C. Rinaldi, “Food and gastronomy for sustainable place development: A multidisciplinary analysis of different theoretical approaches,” *Sustainability*, vol. 9, pp. 1748–, 9 2017.
- [37] B. A. V. Schee, T. W. Aurand, T. Pickens, M. Ma, and A. R. Girap, “Nestlé: Brand alliances in developing markets,” *Journal for Advancement of Marketing Education*, vol. 17, 1 2010.
- [38] P. G. Akerkar and R. K. Srivastava, “A study of new age learning network for business impact in indian service industry with specific reference to information technology sector,” *IRA-International Journal of Management & Social Sciences (ISSN 2455-2267)*, vol. 8, pp. 256–265, 10 2017.
- [39] S. M. Powell, “Journal of brand management – year end review 2015,” *Journal of Brand Management*, vol. 22, pp. 715–720, 12 2015.
- [40] G. Kamstra and J. Wilkinson, “Legal and regulatory update,” *Journal of Commercial Biotechnology*, vol. 14, 10 2008.
- [41] D. Getz and S. Fairley, “Media management at sport events for destination promotion: Case studies and concepts,” *Event Management*, vol. 8, pp. 127–139, 1 2004.
- [42] B. T. Parker, “Branding online news providers: Brand personality and the image congruence effect,” *Studies in Media and Communication*, vol. 2, pp. 60–70, 9 2014.