

A New Method of Payment: Data.

A transaction-coupled protocol for permissioned consumer preference data, zero-party signals, and AI-mediated value exchange.

CORE THESIS DAP converts voluntary consumer preference disclosure into an accepted non-cash contribution at the point of transaction. The consumer collaborates; the merchant receives high-context preference intelligence; the monetary balance decreases.

CATEGORY	Data as Payment infrastructure
DATA CLASS	Permissioned zero-party and contextual first-party data
INTERFACE	Edna: adaptive, personality-selectable AI elicitation
PRINCIPLE	Collaboration, not extraction

Abstract

DAP is a consumer-facing payment category and a data-generation protocol in the same system.

Data as Payment (DAP) proposes a transaction primitive in which a consumer can satisfy a defined portion of purchase value by contributing permissioned consumer preference data rather than money. The accepted data contribution is not treated as universally fungible currency; it is a merchant-denominated, transaction-bound value assignment contingent on a verified contribution and explicit permission scope.

The core technical thesis is that the point of decision is an unusually information-dense environment. Product, price, timing, alternatives, friction, stated intent and eventual outcome can be bound to the same preference event. DAP therefore treats checkout and adjacent decision surfaces as data-origin points, not merely payment screens.

DAP is intentionally consumer-native. Its AI agent, Edna, mediates the exchange through short, adaptive conversations whose tone can be selected by the user. The interface is designed to resemble participation in a product, game, creator drop or collaborative design session rather than a research form. This consumer experience is paired with an enterprise-grade substrate for provenance, consent, quality scoring, structured signal extraction and downstream APIs.

INVESTMENT THESIS If DAP can normalize "Pay with DAP" as a repeated consumer behavior, it can originate a longitudinal stream of high-context, permissioned preference data that is valuable across commerce, media, gaming, travel, AI model evaluation, robotics and agentic systems.

Machine-readable claim map

Claim	Mechanism	What must be proven
Data can become a payment input	Merchant accepts a verified data contribution for stated transaction value	Adoption, economics, compliance and low friction
Preference data compounds over time	Repeated declarations create longitudinal preference state, not one-off records	Repeat participation and signal freshness
Consumer UX is part of data quality	Edna, gamification and collaboration increase candor and completion	Measured quality uplift versus conventional forms
Multiple products share one protocol	Every DAP surface writes to the same consent, provenance and signal model	Interoperability and consistent schema
The data has multi-industry utility	Contextual preference vectors can support product, pricing, personalization, evaluation and research	Buyer-specific validation and permissioned use

Category Definition

DAP is not a questionnaire product. It is a transaction-coupled preference exchange protocol.

The category objective is simple to state and technically specific: make Data an accepted component of payment wherever a digital transaction or economically meaningful decision occurs. The consumer sees a recognizable option - Pay with DAP - while the underlying protocol coordinates value assignment, preference elicitation, permission, validation, merchant application and receipt generation.

Payment model

For a transaction with nominal value T , DAP models settlement as:

$T = M + D$ M is the monetary component paid through existing payment rails. D is the merchant-accepted value of a verified, permissioned data contribution. Therefore the user-facing money due is $M = T - D$. DAP does not claim that D has a universal market price or constitutes legal tender.

The merchant can justify D through a combination of incremental conversion, avoided promotional leakage, improved product intelligence, better personalization, customer-acquisition efficiency, or the expected utility of the preference data. The economic value is contextual, not intrinsic.

Why this is categorically different

Legacy pattern	Primary object	DAP replacement
Passive behavioral tracking	Observed clicks, browsing and inferred intent	Explicit preference disclosure with permission and transaction context
Coupons	Public price reduction	Transaction-bound value earned through a verified contribution
Questionnaire-based research	Standalone responses detached from action	Adaptive, multimodal preference events linked to an actual decision
Loyalty programs	Delayed points for spend	Immediate value for declared preference data and optional longitudinal participation
Data brokerage	Data acquired without a direct consumer relationship	Consumer-authorized exchange with receipt, provenance and scoped reuse

CATEGORY AMBITION DAP to Pay is intended to become the default interface and protocol for data-denominated value exchange, in the same way familiar checkout buttons abstract complex payment infrastructure behind a simple consumer action.

The Data Primitive

Consumer preference is a time-varying state, not a static attribute.

DAP is designed around a distinction that matters for modern data systems: observed behavior is not equivalent to declared preference. A purchase log can show what happened. It often cannot identify the internal trade-off, objection, desired feature, alternative considered, price threshold or social context that produced the action.

Zero-party data is intentionally and proactively shared by the customer. Forrester describes it as including preference-center data, purchase intentions, personal context and how a person wants a brand to recognize them. DAP extends this concept by binding voluntary declarations to transaction context, permission metadata and downstream outcomes. [3][4]

Preference state representation

A DAP interaction can be modeled as an evidence tuple:

$x_i = (u, t, c, e, z, d, \pi, o)$ u = pseudonymous user; t = timestamp; c = commercial or experiential context; e = elicitation event; z = zero-party declarations; d = derived signals; π = permission/provenance vector; o = authorized outcome linkage.

Across repeated interactions, DAP constructs a time-indexed preference state $P(u,t,c)$. This state is not assumed to be globally stable. It can change with price, season, social context, product category, life stage, location, budget, novelty and recent experience.

Why freshness matters

Signal property	Why it changes utility
Freshness	Recent declarations can supersede stale behavioral assumptions.
Context density	A preference tied to a specific product, price and alternative is more interpretable than an isolated answer.
Provenance	The system can preserve what was asked, what was said, which model derived a label, and when.
Permission scope	Usable rights are part of the data object. The same signal can have different permitted uses.
Outcome linkage	Where authorized, purchase, abandonment, return or repeat behavior can test whether declarations predict action.
Cohort coverage	Value increases when the network reaches populations or contexts not well represented in existing datasets.

DAP Protocol

A standardized sequence converts human preference into transaction-bound value.

DAP can be implemented across different merchant stacks while preserving a common semantic contract. The protocol is intentionally separable from any single payment processor, commerce platform or user interface.

Stage	Protocol action	Output
1. Offer	Merchant publishes requested preference fields, accepted value, eligibility, purpose and expiration.	DAP Offer Object
2. Consent	Consumer selects DAP and authorizes the requested contribution and permitted use.	Permission Vector π
3. Elicit / Disclose	Edna asks adaptive questions or Wallet releases approved current fields.	Raw Preference Evidence
4. Validate	Quality, relevance, duplication, abuse and completion are evaluated without requiring positive sentiment.	Validation State
5. Structure	DAP extracts explicit signals and evidence-linked derived features.	Preference Vector P
6. Accept Value	Merchant-side policy accepts the contribution for the stated transaction amount.	Data Value D
7. Apply	DAP issues a transaction-bound entitlement and the monetary balance is reduced.	Settlement Instruction
8. Receipt	Consumer and merchant receive a record of value, fields, purpose, recipient and retention terms.	DAP Data Receipt
9. Learn	Authorized outcome data can update quality and longitudinal preference state.	Outcome-linked Record

DESIGN RULE The contribution must remain useful when it is negative. A consumer who dislikes a product can produce higher information value than a consumer who merely agrees with the merchant.

A data-value score is not the same as a resale price

A merchant may internally estimate contribution utility as $\hat{V} = g(F, R, Q, C, P, O)$, where F = freshness, R = relevance to the decision, Q = response quality, C = contextual richness, P = permission scope, and O = outcome-linkage potential. This is a policy or optimization function, not a universal market price for personal data.

Edna: Adaptive Elicitation

The AI agent is the human interface to the data protocol, not a generic chatbot.

Edna is designed to convert merchant research objectives into short, natural preference conversations. The merchant defines the information objective. DAP controls the conversational experience, interaction length, evidence capture and quality rules. The consumer controls whether to participate and which Edna personality they prefer.

Separation of concerns

Layer	Function
Merchant objective	Specifies the business question: design preference, price trade-off, feature priority, purchase intent, service friction, etc.
Elicitation planner	Selects a small number of high-information questions and conditional follow-ups.
Persona renderer	Transforms the same semantic question into Chill, Direct, Hype, Professional, Chaos, creator-native or domain-specific language.
Conversation controller	Manages turn-taking, timing, clarification, repetition avoidance and stop conditions.
Signal extractor	Separates explicit declarations from model-derived interpretations and preserves evidence.
Governance layer	Enforces permission, restricted fields, retention, age gating where needed and purpose boundaries.

Why personality is a data-quality feature

A one-size-fits-all corporate voice can reduce candor, increase abandonment and produce performative answers. DAP treats interaction style as an experimental variable. Users can select the relationship they prefer, while the semantic objective remains constant. This permits A/B testing of tone, completion, response richness and downstream predictive utility without changing the underlying data contract.

EDNA PRINCIPLE The merchant owns the question objective. DAP owns the elicitation experience. The consumer owns the decision to participate and the permitted use of what they disclose.

Preference Signal Schema

DAP separates declared facts, observed context, model inference and governance metadata.

The system should never collapse a person's direct statement and an AI-generated label into the same field. A robust data architecture keeps each epistemic class explicit and traceable.

Data class	Examples	Treatment
Zero-party declarations	Product preference, stated intent, willingness to pay, reasons, use case, desired feature, self-described emotion	Store as direct evidence with timestamp and context.
First-party context	Product shown, price, offer, session time, merchant, purchase/abandonment/return where integrated	Bind to the event; do not infer more than the event demonstrates.
Derived preference features	Sentiment, price-sensitivity hypothesis, topic, objection class, preference cluster, quality score	Store model/version, confidence and evidence pointer.
Governance metadata	Recipient, purpose, fields, retention, downstream use, revocation status, geographic policy	Treat as part of the data object, not a legal footnote.
Security telemetry	Session integrity, replay indicators, rate limits, device/network risk where appropriate	Segregate from preference data; minimize and retain only as necessary.

Candidate normalized output

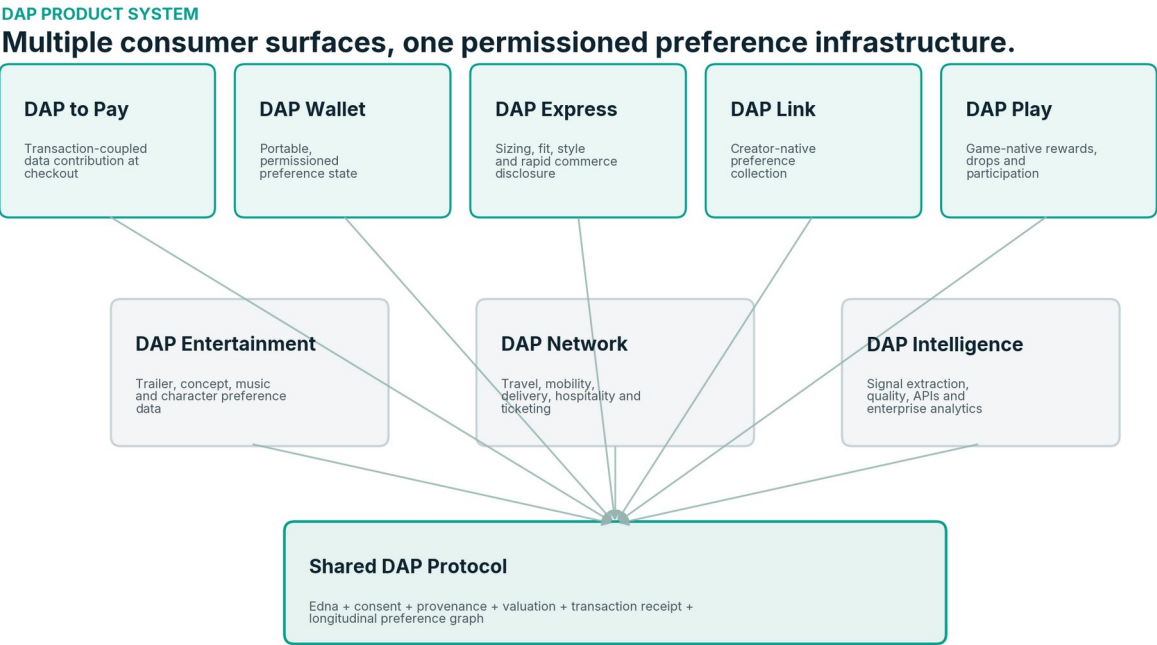
preference_event_id	consumer_pseudonymous_id	merchant_id	product_or_context_id	timestamp	question_objective	raw_response_pointer	declared_preference	purchase_intent	stated_wtp	primary_objection	desired_change	sentiment_hypothesis	quality_score	confidence	permission_scope	retention_policy	outcome_linkage	model_version	evidence_pointer
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The schema is intentionally modality-independent. Voice, video, image ranking, swipe choice, text, wallet disclosure and agent-mediated interaction can resolve into the same normalized preference model.

DAP Product System

Multiple consumer surfaces create one interoperable preference network.

DAP is not a portfolio of unrelated experiments. Each product prototype is a distribution surface for the same underlying exchange: explicit value for permissioned preference data, governed by a shared identity, consent, provenance and signal infrastructure.



The common substrate allows a preference created in one context to remain intelligible to another system without assuming the user has granted cross-context reuse.

Product	Primary environment	Strategic role
DAP to Pay	Cart, checkout, browser extension	Establish the core behavior: data can reduce money due.
DAP Wallet	Cross-merchant consumer profile	Store current preference state and enable selective disclosure.
DAP Express	Fashion and high-friction commerce	Use sizing, fit, style and other declared fields to accelerate purchase and value exchange.
DAP Link	Creator, designer, social and web links	Let creators and brands originate preference events from audiences.
DAP Play	Games	Exchange player preference data for in-game value, access, cosmetics or ad reduction.
DAP Entertainment	Media and culture	Capture contextual reactions to trailers, concepts, music, characters and releases.
DAP Network	Travel, delivery, rides, hotels, flights, ticketing	Embed the protocol into host applications before and after service events.
DAP Intelligence	Merchant and enterprise layer	Normalize signals, measure quality, expose APIs and deliver decision-ready analytics.

DAP to Pay

The wedge: normalize Pay with DAP as a familiar checkout choice.

DAP to Pay is the highest-leverage entry point because it places the exchange at a moment with measurable commercial context. The consumer has selected a product, observed a price and is deciding whether to complete the purchase. Preference data created here can be tied to a real trade-off rather than an abstract hypothetical.

Consumer experience

Pay with DAP appears alongside existing checkout choices. The user is shown the value available, the requested data category, the estimated interaction time and the permitted use before participation.

- Voice, visual, video or Wallet-based contributions can satisfy the offer depending on merchant configuration.
- The benefit is transaction-bound rather than a publicly scrapeable coupon whenever the merchant integration permits.
- Negative, critical or unexpected preference data remains valid if it satisfies relevance and quality requirements.
- The receipt records what was contributed, the value applied and the authorized use.

Merchant objective

DAP to Pay can simultaneously function as conversion infrastructure and preference acquisition. That dual utility is the central economic hypothesis: a merchant can redeploy part of its promotional budget toward acquiring structured consumer intelligence instead of providing an unconditioned discount.

CATEGORY POSITION The customer-facing action is payment. The data-science layer underneath is preference acquisition. DAP should not be positioned as a research form inserted into checkout.

DAP Wallet + DAP Express

Persistent preference state turns one transaction into a reusable consumer capability.

DAP Wallet is the planned control plane for consumer-declared data. Rather than repeatedly requesting the same stable fields, the Wallet can hold timestamped preferences, indicate whether they were explicitly declared or inferred, and allow field-level approval to a specific merchant for a specific purpose.

Wallet data objects

Object	Examples	Control model
Preference fields	Style, fit, categories, brand affinities, delivery choices, communication preferences	Selective disclosure + timestamp + correction
Intent fields	Current category interest, purchase horizon, use case, budget range	Short freshness window + re-confirmation
Contribution history	Prior DAP interactions and value received	Consumer-visible receipt history
Permission ledger	Recipient, purpose, duration, downstream rights	Scoped access + revocation + expiry
Quality/reputation state	Participation consistency and validated contribution quality	Use cautiously; do not penalize negative opinions

DAP Express

DAP Express applies the same infrastructure to high-friction commerce, beginning with apparel and fashion. The consumer can maintain sizing, fit, style, measurement or product-preference fields, approve selected fields for a merchant and receive a transaction benefit. The strategic role is not merely form autofill: Express demonstrates that declared data can simultaneously improve product matching, reduce friction and act as value at checkout.

LONG-TERM INTERFACE Wallet becomes the human-controlled preference memory. Express proves high-frequency utility. DAP to Pay provides the economic incentive to keep the preference state current.

DAP Link

Creator distribution converts audiences into permissioned preference networks.

DAP Link allows a designer, creator, brand, researcher or product team to publish a shareable preference interaction without requiring checkout integration. The creator defines the objective, chooses the reward model and distributes the link through social channels, communities or direct audiences.

Why Link matters strategically

- It decouples DAP distribution from merchant engineering cycles and creates a faster path to preference-supply growth.
- It is native to UGC culture: the interaction itself can become content, particularly when Edna has a recognizable personality.
- It supports design collaboration, concept selection, launch testing, pricing reactions, fan participation and creator-specific rewards.
- It gives DAP access to high-context niche communities whose preferences may be difficult to infer from broad behavioral datasets.

Creator-native loop

Step	Example
Publish	A fashion designer asks followers to choose between two hoodie directions.
Participate	Edna conducts a short conversational preference exchange.
Reward	The user receives a discount, reveal, access, XP, perk or merchant-defined value.
Share	With explicit permission, the user can export a humorous or opinionated interaction as short-form content.
Close the loop	The creator can later show what changed because of participant input.

DISTRIBUTION ADVANTAGE The product can market itself when the act of giving high-signal preference data is entertaining enough to be shared.

DAP Play + DAP Entertainment

Preference collection can behave like a game mechanic, not an interruption.

DAP Play applies the protocol to games: short preference interactions can unlock cosmetics, in-game currency, access, ad reduction or other non-cash value. The underlying data can include character preference, feature prioritization, willingness to engage, monetization sensitivity, content reaction or post-session experience.

DAP Entertainment applies the same model to trailers, episodes, music, live events, characters, creator concepts and other media. It can capture not only a binary choice, but the reasoning and trade-offs behind that choice.

Game-quality interaction primitives

Primitive	Data function	Consumer effect
Drops	Target a specific product, concept or decision	Creates scarcity and episodic participation
XP / Levels	Recognize repeated valid participation	Builds progress and identity
Character unlocks	Reward contribution history or quality	Turns participation into collectible status
Reward reveal	Make value application visible and immediate	Reinforces the exchange loop
Impact callback	Show that participant input changed a design or decision	Creates collaboration credibility
Shareable reactions	Generate user-authorized UGC from the interaction	Turns preference expression into distribution

PRODUCT PHILOSOPHY DAP should feel culturally closer to gaming, creator platforms and social products than to enterprise research software, while producing data that is structured enough for enterprise systems.

DAP Network

The protocol generalizes beyond retail checkout to any decision surface with value exchange.

DAP Network is the embedding layer for host applications such as mobility, food delivery, hotels, airlines, ticketing and service marketplaces. The same protocol can appear before purchase, during selection, immediately after service or as part of a recurring loyalty relationship.

Vertical	Potential preference event	Potential value exchange
Rides / mobility	Comfort, pickup friction, route priorities, vehicle preference	Trip credit, cash-back-equivalent merchant benefit, loyalty value
Food delivery	Menu choice, taste preference, packaging, delivery trade-offs	Order benefit, credit, loyalty or partner reward
Hotels	Room preference, amenity trade-offs, booking objections, post-stay experience	Booking credit, upgrade eligibility, loyalty value
Airlines	Seat, baggage, schedule, fare and service trade-offs	Fare benefit, points, ancillary value
Ticketing / events	Artist, venue, price, seat, timing and experience preference	Ticket benefit, access, merchandise or loyalty
Marketplaces	Selection criteria, trust barriers, category intent, service outcome	Transaction credit, fee reduction or partner-funded value

The network design allows DAP to observe preference shifts across contexts while maintaining merchant isolation and purpose boundaries. Cross-context learning should require explicit rights; a shared protocol does not imply unrestricted data pooling.

DAP Intelligence

Consumer-native interaction on the front end; decision-grade data infrastructure on the back end.

DAP Intelligence is the normalization and delivery layer that converts multimodal preference evidence into structured outputs for merchant analytics, experimentation, product systems and, where separately authorized, external data products.

Core analytical outputs

Signal family	Examples
Preference	Choice ranking, design direction, feature priority, product affinity
Intent	Purchase intent, repurchase intent, consideration horizon, switching intent
Economics	Stated budget, willingness to pay, price objection, incentive sensitivity
Experience	Friction, satisfaction, complaint category, service trade-off
Reasoning	Why a user prefers one option, objection drivers, needs, desired changes
Quality	Relevance, completeness, contradiction, low-effort/troll risk, confidence
Outcome	Purchase, abandonment, return, repeat use, redemption, follow-on engagement where authorized

Enterprise delivery

- Merchant dashboard: cohort trends, preference distributions, buyer-intent patterns and evidence drill-down.
- APIs / webhooks: normalized events into warehouses, CDPs, analytics stacks and product systems.
- Model context: permission-aware retrieval of current preference state for authorized AI agents.
- Research feeds: aggregated temporal indices or benchmark datasets only under separate, explicit rights and validated privacy controls.

DATA POSITIONING The durable asset is not a pile of transcripts. It is a governed graph of preference evidence with context, provenance, permissions, quality metadata and longitudinal change.

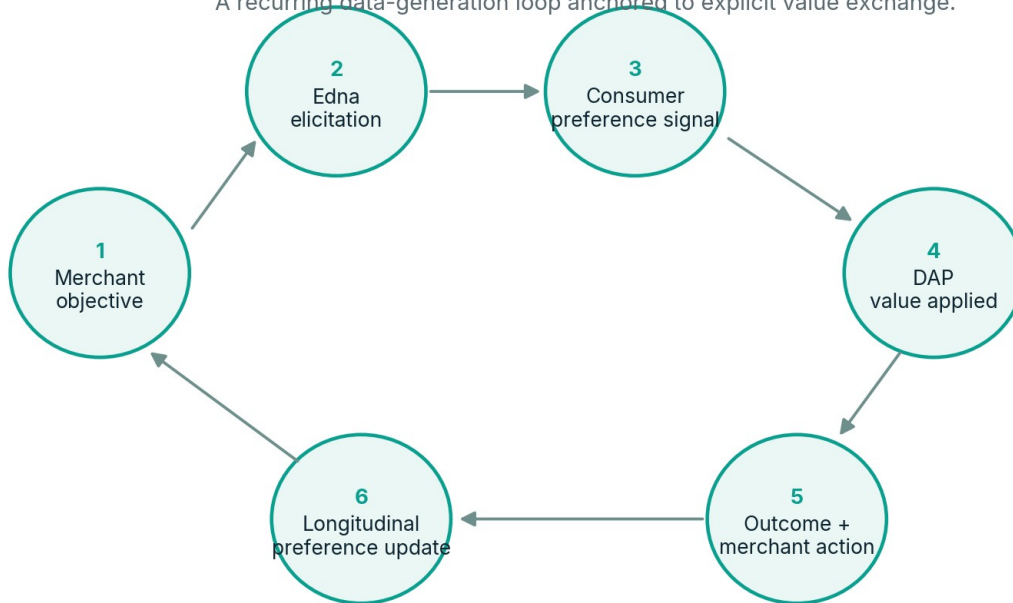
Participation Economics

Gamification is not decoration; it is a mechanism for repeated voluntary data generation.

The DAP loop attempts to solve a structural problem in preference acquisition: high-value consumer data is often difficult to collect repeatedly because conventional interactions are boring, contextless or one-sided. DAP makes the consumer experience itself part of the system design.

THE DAP PARTICIPATION LOOP

A recurring data-generation loop anchored to explicit value exchange.



Reward optimization

A mature DAP system can treat reward design as an optimization problem: minimize merchant cost subject to completion, quality, consumer satisfaction and conversion constraints. Different users may prefer different value forms: immediate price reduction, cash-back-equivalent merchant credit, access, in-game items, creator perks, XP or status.

Quality-weighted participation

Quality scoring should reward useful effort rather than agreement. A longer answer is not automatically better, and a critical answer is not lower quality. Useful dimensions include specificity, relevance, internal consistency, response-to-question alignment, temporal freshness and observed predictive utility. Any score that affects access or value should be tested for demographic and linguistic bias.

COLLABORATION LOOP The strongest retention event is not the reward itself. It is proof that the consumer's preference data affected a product, design, service or creator decision - "they actually listened."

Cross-Industry Applicability

The same primitive can support different preference domains without changing the core protocol.

Industry	High-value preference data	DAP surface / application
Fashion / beauty	Style, fit, color, texture, routine, price sensitivity, product objections	to Pay, Express, Link, Wallet
Retail / DTC	Product choice, bundle preference, intent, willingness to pay, feature trade-offs	to Pay, Wallet, Intelligence
Gaming	Cosmetics, maps, mechanics, characters, difficulty, monetization tolerance	Play, Wallet, Intelligence
Media / entertainment	Trailer reaction, character affinity, content intent, concept preference	Entertainment, Link
Creator economy	Audience taste, product co-creation, merch design, sponsorship reaction	Link, Wallet
Travel / hotels	Schedule, seat/room, amenities, service trade-offs, booking friction	Network, Wallet
Mobility / delivery	Convenience, price/time trade-off, service preference, post-use experience	Network, Intelligence
AI model developers	Human preference examples, evaluative judgments, changing intent, conversational style preference	Intelligence + separately permissioned datasets
Robotics / service agents	Interaction style, assistance priorities, acceptable behavior and escalation preference	Intelligence + agent interfaces
Financial / institutional research	Aggregated, delayed cohort indicators of demand, price pressure and product preference	Permissioned aggregate data products
Healthcare / life sciences*	Patient-reported experience and access preference under dedicated governance	Future regulated deployment only

*Healthcare is a separate governance domain. DAP should not commingle sensitive clinical data with the general consumer preference network, and any deployment would require purpose-specific legal, security and clinical review.

GENERALIZATION TEST A new vertical belongs in DAP when it contains: (1) a meaningful human preference or intent state, (2) a party willing to pay for better knowledge of that state, (3) a consumer benefit for disclosure, and (4) a permission model that can be made explicit.

Agentic Commerce

DAP can become a preference and authorization layer for AI purchasing agents.

As AI agents increasingly mediate shopping, the consumer may no longer navigate every merchant interface directly. DAP Wallet can expose permissioned preference state to authorized agents while DAP to Pay exposes data-payment offers as structured tools or APIs.

Agent-mediated sequence

Step	Agent behavior	DAP control
Discover	Agent queries merchant offers and sees that a data contribution can reduce monetary total.	Return product, requested fields, value, purpose, expiry and eligibility.
Explain	Agent presents the exchange to the user.	Human-readable data contract and value.
Authorize	User approves selected Wallet fields or agrees to fresh elicitation.	Scoped token; recipient/purpose binding.
Elicit / transmit	Agent calls Edna or sends current approved preference fields.	Provenance, freshness and anti-fabrication controls.
Apply	Merchant accepts the contribution and reduces money due.	Transaction-bound entitlement + receipt.
Persist	Authorized signals update Wallet state or remain merchant-local.	Retention and cross-context rights enforced.

Model Context Protocol and conventional APIs can provide interoperability surfaces, but protocol connectivity is not permission. Authorization must be explicit, scoped and enforceable. The current MCP specification continues to harden OAuth-based authorization and production security boundaries. [6]

AGENTIC ENDPOINT A user should be able to tell an AI agent: "Use my DAP preferences if it gets me a better deal, but only share the fields required for this purchase."

Consent, Provenance and Privacy

Rights are part of the data structure.

DAP's long-term value depends on being trusted enough that consumers repeatedly disclose data they could otherwise withhold. Governance therefore cannot be treated as a compliance wrapper added after collection. It must be encoded at the event level.

Control	System requirement
Purpose limitation	Separate merchant product improvement, personalization, AI training, research licensing and unrelated downstream use.
Selective disclosure	Allow field-level or bounded-object approval rather than whole-profile access.
Freshness / expiry	Preference fields can become stale; require timestamps and re-confirmation policies.
Provenance	Preserve question/objective, source modality, model version, transformation history and evidence pointers.
Derived-data separation	Do not present model labels as if the user explicitly stated them.
Revocation / retention	Stop future access where applicable and explain what can or cannot be deleted after an authorized use.
Sensitive-data isolation	Health, precise location and other high-risk classes require separate product boundaries and legal controls.
Consumer receipt	Provide a persistent record of what was shared, with whom, why, for how long and what value was received.

The NIST Privacy Framework provides a useful risk-management reference for building products that protect individuals while enabling data utility. DAP can operationalize that philosophy by making permission state machine-readable and transaction-specific. [5]

TRUST THESIS Collaboration is not branding layered over extraction. The architecture must make the user an explicit counterparty to the data exchange.

Defensibility

The moat is the networked preference graph, not the interface alone.

The visible parts of DAP - a checkout widget, AI voice, reward animation or gamified prompt - can be imitated. Defensibility emerges only when several compounding assets reinforce one another.

Layer	Compounding asset	Why it is difficult to reproduce
Consumer network	Repeated users with trusted DAP identity and Wallet state	Requires habit, brand trust and cumulative participation.
Merchant distribution	Integrated decision surfaces across merchants and verticals	Requires distribution, SDK reliability and proven economics.
Longitudinal preference graph	Time-series preference data with context and outcome linkage	Cannot be scraped from the open web; it must be repeatedly originated.
Edna relationship layer	Personalization history, selected personas and interaction policy	Improves elicitation through accumulated user-specific interaction preference.
Permission / provenance graph	Machine-readable rights attached to data events	Makes downstream use auditable and more enterprise-compatible.
Quality models	Empirical scoring of usefulness, fraud risk and predictive value	Requires labeled operational data and continuous evaluation.
Cross-surface interoperability	to Pay, Wallet, Express, Link, Play, Entertainment and Network on one schema	Creates more contexts per user and more utility per integration.

Three-sided network logic

- Consumers receive value, identity, progress, collaboration and control.
- Merchants receive context-rich preference signals and potentially improved economics.
- Authorized enterprise data buyers receive higher-provenance, fresher human preference evidence.

The network becomes stronger when each side increases the utility of the others without requiring hidden tracking. The challenge is to preserve user trust while expanding data utility.

Business Model and Market Adjacency

DAP sits at the intersection of commerce, customer intelligence and human preference data.

U.S. retail e-commerce sales reached \$340.2 billion in Q2 2026, representing 17.1% of total retail sales. This is a distribution reference, not a DAP revenue estimate. [1] The existing white paper also cited ESOMAR's \$142 billion global insights-industry figure for 2023 as adjacent buyer spending, not a direct TAM. [2]

Potential revenue layers

Layer	Commercial model	What customer is buying
Merchant infrastructure	SaaS, usage pricing, enterprise contract or platform fee	DAP offers, SDKs, Edna interactions, analytics, controls and support
Accepted interaction processing	Per completed/validated interaction or modality-based usage	Preference acquisition and structured output
Wallet / agent APIs	Enterprise access, orchestration or premium integration	Permission-aware preference portability and agent commerce
Permissioned data products	Subscription or license under separate rights	Aggregated trend indices, benchmark datasets, evaluation data or research feeds
Brand / creator activations	Campaign, drop or collaboration program	High-engagement product co-creation and audience preference data

Unit economics to validate

- Merchant-funded value versus incremental margin and avoided promotional leakage.
- Cost per accepted, useful preference event including inference, transcription, storage, abuse and support.
- Completion and repeat choice versus checkout friction.
- Data-buyer renewal versus one-time novelty value.
- Consumer retention as a function of reward, entertainment, control and demonstrated impact.

BUSINESS MODEL DISCIPLINE The monetary benefit shown to the consumer is not automatically DAP revenue, and permission to help one merchant does not automatically authorize resale or model training. Separate products require separate economics and rights.

Execution and Research Program

The category becomes credible through measurable behavior, not vocabulary.

DAP's ambition is broad. The execution plan should remain experimentally narrow: establish one high-frequency behavior, validate economics and data quality, then expand the protocol across products and industries.

Phase	Research question	Evidence target
1. DAP to Pay behavior	Will consumers voluntarily choose data as part of payment?	Choice rate, completion, time, repeat use, satisfaction, abandonment
2. Merchant utility	Does the exchange create net economic or intelligence value?	Incremental margin, conversion, usable signal rate, merchant retention
3. Edna optimization	Which personalities and interaction policies maximize quality and candor?	Controlled tests across tone, modality, follow-up depth and cohort
4. Signal validity	Do extracted labels match human review and predict downstream behavior?	Accuracy, calibration, unknown rate, bias tests, predictive lift
5. Wallet portability	Does selective disclosure increase repeat participation and reduce friction?	Permission renewal, field freshness, cross-merchant reuse, user trust
6. Multi-surface network	Do Link, Play, Entertainment and Network increase supply without diluting quality?	Cross-surface retention, unique cohort reach, cost per usable signal
7. Enterprise data products	Will external buyers renew for permissioned preference data?	Paid pilots, utility studies, privacy validation, renewal
8. Agentic commerce	Can AI agents use DAP safely without fabricating human preference?	Scoped authorization, provenance integrity, agent completion and auditability

Primary technical metrics

Preference-event completion rate; median elicitation time; quality-weighted usable event rate; signal freshness; permission scope; model calibration; contradiction/unknown rate; fraud escape rate; false-positive rate; outcome-linkage coverage; repeat DAP choice; merchant ROI; consumer trust and retention.

SCIENTIFIC STANDARD DAP should publish claims only after measured validation. The strength of the white paper is not that it describes a large future; it is that the future can be decomposed into falsifiable product, data and economic hypotheses.

Conclusion

A new payment method can also create a new class of data infrastructure.

DAP begins with a simple consumer proposition: a person can contribute something they know about themselves - a preference, intention, constraint, judgment or current context - and receive immediate value in return. The technical system underneath that simple proposition is substantially larger.

If executed correctly, DAP becomes a transaction-coupled preference infrastructure: a standardized method for originating zero-party data, binding it to real context, preserving permission and provenance, converting multimodal human expression into structured signals, and applying merchant-defined value at the moment of decision.

The product portfolio is therefore coherent. DAP to Pay establishes the payment behavior. Wallet maintains permissioned preference state. Express applies that state to high-friction commerce. Link distributes the protocol through creators and communities. Play and Entertainment turn preference generation into a cultural behavior. Network extends the protocol into services. Intelligence makes the resulting signals useful to enterprise systems and AI.

DAP A New Method of Payment: Data. Consumer preference becomes an explicit economic input. Collaboration is the interface. Permission is the contract. Edna is the elicitation layer. The preference graph is the compounding asset.

The strategic objective is not to make data extraction more efficient. It is to make direct collaboration with consumers so useful, enjoyable and economically aligned that covert inference becomes a worse product.

References and Technical Glossary

Selected external references and terms used in this paper.

[1] **U.S. Census Bureau** Quarterly Retail E-Commerce Sales, Q2 2026. August 18, 2026.
<https://www.census.gov/retail/ecommerce.html>

[2] **ESOMAR** Global Market Research / Research Software 2024 library description; historical 2023 global insights-industry context. <https://shop.esomar.org/knowledge-center/library?publication=3019>

[3] **Forrester** Ask, Don't Interrogate: Best Practices For Collecting Zero-Party Data. March 13, 2025. Defines zero-party data as intentionally and proactively shared customer data.

[4] **Polonioli et al., Frontiers in Big Data** Zero party data between hype and hope. 2022.
<https://www.frontiersin.org/journals/big-data/articles/10.3389/fdata.2022.943372/full>

[5] **NIST** Privacy Framework. Enterprise privacy-risk management reference. <https://www.nist.gov/privacy-framework>

[6] **Model Context Protocol** 2026-07-28 specification release and authorization hardening.
<https://blog.modelcontextprotocol.io/posts/2026-07-28/>

[7] **Anthropic** Training a Helpful and Harmless Assistant with Reinforcement Learning from Human Feedback. 2022. Evidence of human preference data in modern AI development.

Glossary

Term	Definition in DAP
Data as Payment	A transaction model in which a verified, permissioned data contribution is accepted for stated purchase value.
Zero-party data	Information the consumer intentionally and proactively provides, including preferences, intentions and personal context.
Preference event	A time-stamped, context-bound record of a declared preference plus its evidence and permissions.
Preference state	The current, context-sensitive representation of a user's known declared preferences and approved derived signals.
Edna	DAP's adaptive AI elicitation layer, with user-selectable personality and a shared semantic objective.
DAP Offer Object	The machine-readable description of requested contribution, value, purpose, eligibility and expiration.
Permission vector π	The recipient, fields, purpose, duration, retention and downstream-use constraints bound to a preference event.
DAP Data Receipt	The consumer/merchant record of what was contributed, what value was applied and what permissions govern use.
Preference graph	Longitudinal network of context-bound preference events, provenance and authorized outcomes.
Collaboration, not extraction	DAP's system principle: the user is an explicit counterparty to the data exchange, not an invisible data source.

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