



WHITEPAPER

Segmentation for a Modern World

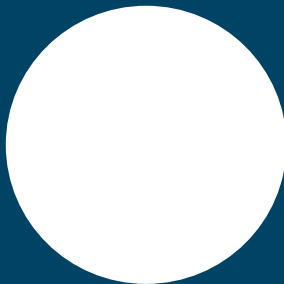


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The Modern Marketer's Challenge

Segmentation has long been the cornerstone of sound marketing strategy. For decades, it has provided marketers with a solution to the challenges of diversity in consumer interests, attitudes and behavior: Identify “like” segments of consumers, and tailor marketing strategies and advertising to each.

However, we're now in the age of empowered and connected consumers who are simultaneously more distracted and demanding than ever. Though the cost to advertise continues to rise, consumer attention has waned. They now expect marketing communications across all touchpoints to earn their attention with a greater degree of relevance — reflecting their current lifestyles, needs and desires. Meeting this demand requires more precise and nuanced segments — and more consumer data.

In response, the marketing landscape has evolved to provide marketers with an ever-increasing supply of data. This includes technologies to capture internal data — especially data on customer transactions — and technologies to distribute third-party data. In theory, all this data could be combined to create a 360-degree view of consumers. Yet, each of these technologies creates its own unique identifiers to recognize consumers, so integrating consumer data — for analyses and activation — becomes daunting.

Thus, in the context of segmentation, modern marketers now face three broad challenges:

- **Achieving an integrated dataset that provides a 360-degree view of their consumers**
- **Achieving the degree of segment precision required for relevancy and prediction**
- **Leveraging segmentation within the modern marketing ecosystem.**

What is segmentation?

Segmentation is an approach with an established pedigree. The term, which first arose in marketing in 1956, describes the method most commonly used to manage the diversity in consumer interests, attitudes and behaviors. It's the process of dividing up a market into distinct subsets — or segments — where any subset could conceivably be selected as a marketing target to be reached with a distinct marketing mix.

Segmentation yields homogeneous consumer groups from a base of heterogeneous consumers. These groups may then be described, or profiled, according to the characteristics most valuable for marketing activation. Today, many different types of data can be used — individually or collectively — to inform segmentations and segment profiles. These include:

Demographic — variables such as age, gender, income, occupation, family size, etc.

Geographic — customer household location and related descriptive variables, including cost of living and urbanicity.

Attitudinal — reasons why customers use products and services.

Behavioral — actual purchase behaviors, transactional data and customer interactions.

Preference-based — variables such as media, channel and product preferences.

Lifestyle — customer beliefs, opinions, habits and preferences.

Customer state — status of the customer's relationship with the business (new customer, lapsed user, etc.).

Needs-based — perceived drivers and trade-offs in purchase behavior.

Value-based — customer revenue, profit and lifetime value.

Modern marketers incorporate multiple types of data in their segmentations in order to capitalize on the unique benefits — and mitigate the individual weaknesses — of each.

The Need for 360° Consumer Data

To develop resonant marketing strategies and relevant communications, marketers must first understand who their consumers are. This is not easy. Collectively, consumers are diverse and individually, they're multifaceted.

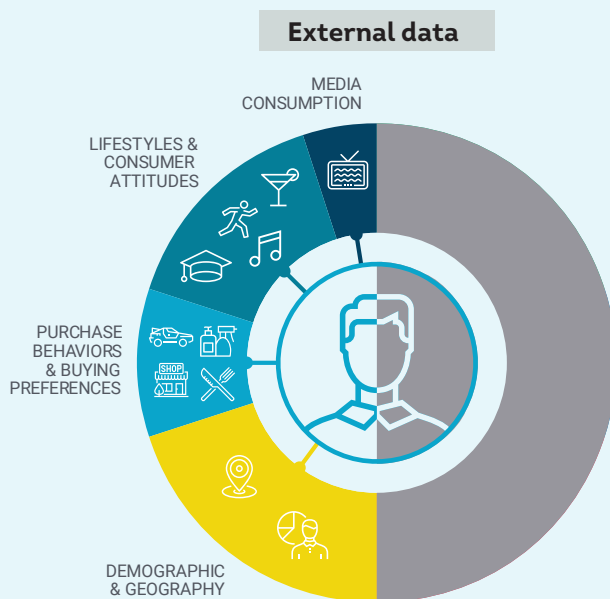
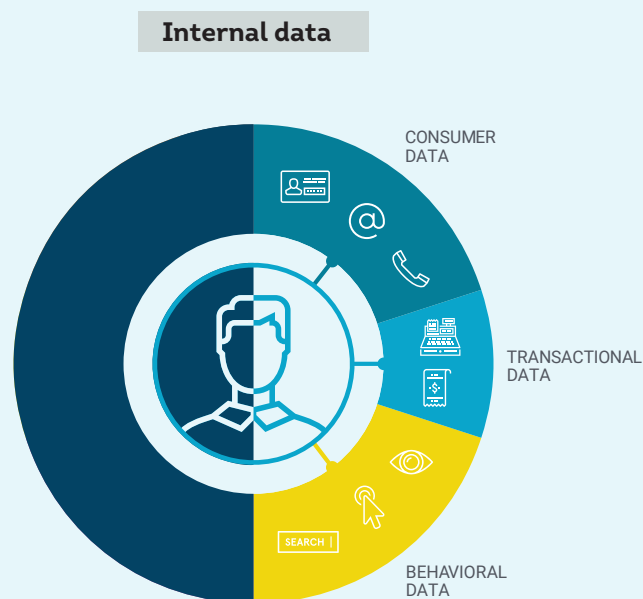
Marketers sometimes rely solely upon their own internal data to develop segmentation schemas.

However, internal customer data is often imperfect: Between 50%-70% of CRM data is erroneous due to imprecise statistical modeling and unresolved identifiers. A hefty 90% of records or more can be incomplete as marketers seek to streamline customer experiences by not requiring the input of every name, address, phone or email. Additionally, consumers today utilize multiple devices – and change them frequently.

Most importantly, internal data is simply not enough to combat the challenges of multifaceted consumers; it only provides a very narrow view of your customers – based on their limited interactions with your brand.

In contrast, most traditional segmentation solutions rely solely upon external data from syndicated research providers.

However, this does not yield competitive differentiation because syndicated data is readily available to both the marketer and their competitors alike. Additionally, external data is not as predictive as internal data. In order to build the most effective predictive segmentation model, marketers should integrate their internal data – data that can be used to predict the behaviors and purchase patterns of their unique customer bases.



The Need for Precision

Both relevancy and prediction require precision. In order for segmentation to be predictive, it must be able to capture the nuances of consumer behavior at a very granular level. If segments are too broad, they risk aggregating potentially heterogeneous groups.

Segmenting your market into more granular segments requires more precise identification; the geographic averages commonly used in traditional segmentation schemas are no longer sufficient. Many traditional segmentation solutions provide only 50–60 one-size-fits-all segments. Advertisers today believe this approach doesn't provide the level of granularity necessary to derive sufficiently nuanced and predictive insights.

Additionally, today's marketplace is much more fragmented than ever, so even segmentation schemas that are industry focused are considered too broad. For example, "consumer packaged goods (CPG)" often describe food, beverages, cosmetics, paper goods, cleaning supplies and other household items — yet the market for each of these products varies significantly. A single segmentation schema cannot adequately represent the diversity in consumer interests, attitudes and behaviors across all of CPG.



The Need for Granularity: An Example

Here's an example to illustrate the need for segment granularity.

The following describes characteristics of three different segments, each displaying various propensities to own a motorcycle (as shown in the Index column).

| Segment | % Own motorcycle | Motorcycle ownership index | HH income | Age of HOH | % of children | % own home | Cost of living | Urbanicity |
|------------|------------------|----------------------------|-----------|------------|---------------|------------|----------------|------------|
| Segment 20 | 2.43% | 30 | \$131,875 | 39.5 | 100% | 100% | 71% | Suburban |
| Segment 21 | 8.24% | 101 | \$131,875 | 39.5 | 100% | 100% | 82.2% | Small town |
| Segment 22 | 13.31% | 164 | \$131,875 | 39.5 | 100% | 100% | 100% | Rural |

Overall in the US, roughly 8% of households own a motorcycle. However, that ownership rate can vary significantly even among households that, at a high level, look exactly the same.

Each of the three segments display the same age, income, presence of children and homeownership. The only difference between these three segments is where they live – whether in more urban or rural neighborhoods (as represented by the “Urbanicity” measure). Rural households are significantly more likely to own a motorcycle. Thus, a motorcycle marketer would benefit from targeting Segment 22, but should likely exclude Segment 20.

Traditional segmentation schemas would place all three of these segments into a single category. However, in doing so, they'd miss an opportunity to drive efficiencies by eliminating micro-segments which are less likely to convert – while focusing spend on those who are most likely to convert.

Balancing Precision and Actionability

While segmentation is essential to modern marketing, leveraging segmentation within the modern marketing ecosystem has become increasingly complex. First, today's fragmented marketplace necessitates more granular segmentation. Second, as consumer behavior and evolving privacy regulations impact data access for marketers, a common view across consumers and households is critical to delivering personalized experiences across fragmented devices. The average US household consumes media using 17 connected devices.¹ To media delivery mechanisms, each of these devices appears to be a different person.

Thus, modern marketers face a balancing act between defining target audience segments that are sufficiently nuanced yet still actionable — or able to be identified and reached within the fragmented media landscape.

This is a fundamental challenge of accurate identification. In order to reach your target audience with marketing communications, you must accurately identify them across a fast-growing array of potential touchpoints.

¹ - <https://www.parksassociates.com/blogs/in-the-news/parks-average-us-internet-home-had-17-connected-devices-in-2023>



How Traditional Segmentation Solutions Fall Short

Traditionally, marketers have had two options for customer segmentation: rely on syndicated solutions or develop a fully custom segmentation model. Unfortunately, both options utilize insufficient consumer identification methodologies; thus, neither is well-suited to meet the complex needs of modern marketers.

Syndicated segmentation solutions

Syndicated segmentation solutions rely upon very broad, standardized or “pre-canned” segmentation schemes that are not customized to specific companies’ marketing strategies. These solutions try to be all things to all people. As a result, they’re blunt instruments that fail to deliver the laser-like precision necessary to achieve relevance to the brand or provide competitive differentiation.

Traditional syndicated segmentation solutions are handicapped by insufficient identification capabilities in two areas. These models typically aggregate households — such as by ZIP Code or ZIP+4 in the US — in order to maximize coverage, so they lack the precise identification required to achieve very granular segmentations. Additionally, if they allow for customization, they often lack the capability to match a marketer’s internal customer data using multiple fractional identifiers. This results in lower match rates against the marketer’s customer data, less customer data available to be incorporated into the segmentation model, and a less customized segmentation model.

Custom segmentation models

Fully custom segmentations are bespoke models built using a marketer’s customer data, potentially at a steep price. These are often too insular to be actionable in the real world for online targeting or website personalization, or against unknown prospects. Insights that aren’t actionable are worthless, so fully custom segmentations often end up just gathering dust on the shelf. Ultimately, custom segmentations struggle with actionable identification. They’re unable to link segments to audiences that are targetable via online and offline media channels.

The behavioral targeting challenge

Behavioral targeting is a strategy utilized by many marketers. This targeting approach typically is based on “behavioral” data captured via browser-based cookies — such as website visitation and online activities.

Segmenting consumers based on online behaviors can be a strong, complementary targeting strategy to more robust customer segmentation — which should allow marketers to engage consumers in both proactive and reactive fashion. However, today this methodology is challenged by the declining availability of identifiers, such as the evolution of third-party cookies and opt-in requirements.

Recent changes from large technology companies and global privacy regulations pose challenges for marketers implementing solely behavioral targeting strategies. Apple’s Tracking Transparency and Google’s strategy around third-party cookies impact data access commonly used for such targeting. Additionally, privacy regulations like GDPR and newer US-posed data privacy policies have limited the way marketers collect and use data. Thus, cookie-based techniques can no longer be leveraged for persistent and reliable targeting.

As data deprecation continues to impact addressability across prominent consumer media channels, an actionable segmentation that does not rely solely on cookies is increasingly more important. Consumer segmentation that combines first- and third-party data can be leveraged to analyze CRM data across a consistent framework. This allows marketers to maximize learnings based on their own customers’ behaviors, gain intelligence beyond their own data, and activate marketing accordingly.

Actionable Segmentation for the Real World

To meet increased consumer expectations for relevant, personalized communications, marketers seek a segmentation solution that's customizable, precise and actionable.

Customizable:

Your segmentation must be informed by an integrated dataset providing a 360° view of your consumers, reflecting the many different facets of their lives (their interests, needs and lifestyles) and including their preferences with regard to your products or services. This requires a solution able to customize external, syndicated data by integrating marketers' internal customer data.

Precise:

Segmentation must be precise enough to reflect the degree of fragmentation in today's marketplace where industries have been categorized into smaller and smaller verticals reflecting very specific product and service categories. Tactically speaking, it must divide the population into granular segments small enough to capture the diversity in consumer interests, needs and attitudes with regard to a multitude of niche verticals. Yet, this precision must be housed within a flexible framework, enabling scalability and manageability.

Actionable:

Relatedly, segmentation must also be actionable – that is, able to be leveraged to target consumers and personalize messaging across both offline and online channels, and applicable throughout the enterprise.

This requires two distinct capabilities:

1. An accurate identification methodology that reconciles multiple consumer identifiers and resolves them into a single view – to enable both internal and external data integration and cross-channel activation.
2. A flexible framework for precise, customized segmentation development.



TransUnion Market Analytics and Segmentation With TruAudience Consumer Insights

TransUnion market analytics and segmentation with TruAudience® Consumer Insights empowers marketers to meet the needs of hyperconnected, demanding and distracted consumers via precise and customized yet actionable segmentation.

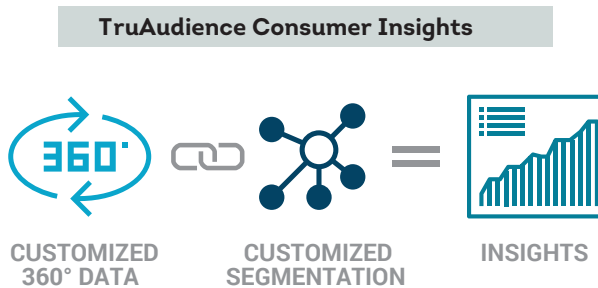
TruAudience segmentation is comprised of four interrelated components:

- The TruAudience predictive analytics framework – the building blocks for precise, customized segmentations
- A robust repository containing 15,000+ consumer attributes
- TransUnion’s authoritative identity graph which enables more accurate integration, normalization and resolution of a marketer’s internal data and TransUnion’s external consumer data repository, providing a 360° view of your consumers
- The TruAudience Consumer Insights platform: A powerful, real-time data exploration, visualization and reporting interface that enables insight derivation and custom segmentation model development

In addition to Consumer Insights, TruAudience offers a full suite of end-to-end marketing solutions – which enables smarter marketing powered by a clear and persistent view of your customers across channels, platforms and devices.



How TruAudience Consumer Insights Works



With TruAudience Consumer Insights, marketers can layer any of their internal data against a robust dataset of over 15,000+ consumer demographic, attitudinal and behavioral attributes to build an accurate, 360° view of their markets. The result is a robust, predictive dataset aligned to their unique business. This customized data can then be used to tailor a segmentation schema that can be leveraged throughout the enterprise to:

- Inform the development of a proactive marketing strategy
- Inform various cross-functional tactics
- Directly target – and personalize messages to – segments in real time, across both online and offline channels

Customization is enabled at two levels:

- A customized dataset providing a 360° view of your customers, prospects and market
- A customized segmentation schema that's perfectly aligned to the needs of your business

What kinds of intelligence and answers can TruAudience Consumer Insights provide?

Targeting

- Who are your best customers?
- Where can you find consumers that look like your best customers?

Media planning and promotional

- Through which offline and online media channels are you most likely to reach your target consumers?
- What specific offline and online media outlets/publishers do they consume?
- What are their key purchase drivers?
- In which geographic markets are your target consumers most highly concentrated?
- In which types of retail outlets do they buy your products?

Messaging

- Which of your products do they purchase?
- What messages are most likely to resonate with your target audiences?

Competitive

- Which consumer segments are most likely to purchase your competitors' products or services?
- How do your customers compare to consumer segments that purchase your competitors' products or services?

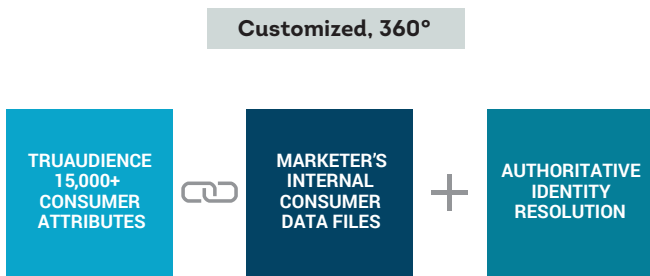
Market expansion and site selection

- In which geographic markets are your target consumers most highly concentrated?
- Where are your competitors located – and where are they not located – in relation to your target consumers?
- How does your current retail distribution align with the geographic distribution of your target consumers – and where are there gaps to fill?

Product

- How does your product portfolio align with consumer needs?
- What are specific segment needs that are currently unmet by your product portfolio?

Customized, 360° Consumer Data



TruAudience Consumer Insights enables marketers to easily integrate their internal customer data with TransUnion's robust repository of syndicated, external data.

The result is a dataset that:

- Provides 360°, holistic views of a marketer's customers, prospects and markets
- Is predictive of future purchase behaviors
- Is robust, including attributes describing consumer demographics, interests, attitudes, lifestyles and buying preferences – as well as product purchase propensities for a vast array of products, services and brand names
- Is relevant to a marketer's unique business needs
- Is differentiated from a marketer's competitors

TransUnion's authoritative identity graph system makes this possible.

With TransUnion's market analytics and segmentation solution, marketers have access to a robust dataset of over 15,000+ consumer attributes. These include predictive attributes describing:

- **Demographics** – variables such as age, gender, income, occupation, nationality, family size, etc.
- **Lifestyles** – consumer beliefs, opinions, habits and lifestyles
- **Geography** – consumer household location and related descriptive variables like cost of living and urbanicity
- **Attitudes** – reasons why consumers use products and services
- **Needs** – perceived drivers and trade-offs in purchase behaviors
- **Purchase behaviors** – specific products, services and brand names consumers purchase
- **Buying preferences** – where and how consumers prefer to buy specific products and services, and brand propensity
- **Media and channel preferences** – which media channels and specific media outlets/publishers consumers consume



TransUnion's Authoritative, Identity-Based System

Consumer identification lays the groundwork for all marketing efforts. If you don't get identity right, everything that follows is wrong. Underlying the TruAudience predictive segmentation framework is TransUnion's authoritative identity graph which reconciles the many identifiers generated in different channels, and resolves them into a single TransUnion persistent identifier for a consumer – allowing for more accurate linkages across different media channels and at immense scale.

This is possible because TransUnion maintains a large repository of consumer intelligence covering 250 million individuals (US adults) and 125 million households. This data is sourced from over 200 authoritative sources, allowing us to cross-verify and validate accuracy. Additionally, because consumer data changes frequently, we augment and corroborate this data as often as every 15 minutes.

TransUnion's authoritative identity graph enables the linkage between a marketer's internal customer identifiers and TransUnion's robust external data. Importantly, TransUnion is able to match marketers' data to the TruAudience segmentation repository using multiple fractional records, resulting in higher match rates and more usable first-party data to feed segmentation.

Match on all identifiers

Standard geodemographic schemas rely upon household address as the key identifier against which to match a customer. However, customer databases are often imperfect and incomplete, so a full, accurate household address

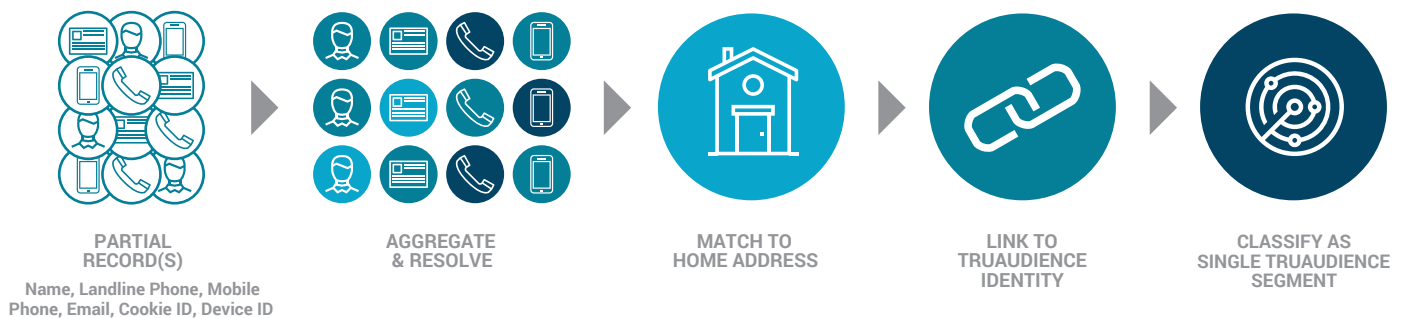
simply isn't available within a marketer's CRM database. And prospect data files are even less likely to contain a consumer's full name and address. TransUnion has overcome this challenge by building the capability to match against records that lack addresses – as our graph can resolve landline phone numbers, mobile phones and email addresses to an identity with a home address.

Continually corroborated data

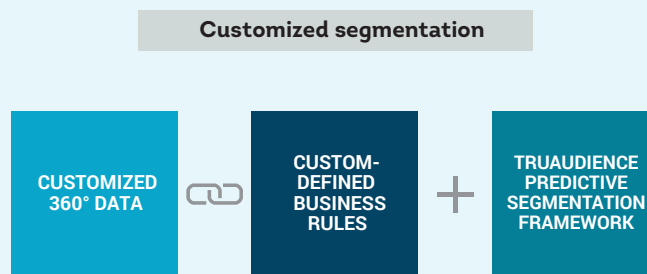
Consumer identity data changes. People change devices frequently, bringing new, unknown identifiers into their interactions. Even offline data is at risk of becoming outdated as 1.2M people change residences every month. This often introduces redundancies that complicate the process of accurate identification.

TransUnion overcomes this challenge by continually corroborating and augmenting our data as often as every 15 minutes, 24 hours a day, 7 days a week. TransUnion is uniquely positioned to accomplish this feat, thanks in part to the network effect of seeing 10B+ daily, real-time customer inquiries. Since TransUnion's repository of authoritative identity sources is continually corroborated, linkages back to a home address – and thus, classification to the TruAudience segments – are more accurate and robust.

Using TransUnion's authoritative identity, TruAudience Consumer Insights maps marketers' internal data to one of the 172 mutually exclusive base micro-segments.



Flexible Framework for Precise, Customized Segmentation



The most effective segmentations are customized according to your unique business needs, including the right number of segments to enable the derivation of relevant insights... no more, no less.

Additionally, segmentation should be applicable across the enterprise. While answering the question "Who is my best customer?" is critical, real competitive differentiation is achieved when this knowledge can be applied across all cross-functional use cases. Companies that are most successful at both customer acquisition as well as retention are those that utilize a common language (throughout the organization) when talking about customers.

The TruAudience predictive segmentation framework provides a flexible approach that enables customized, precise segments which can be leveraged across the enterprise using the same "language," allowing for consistent, cross-functional collaboration and alignment.

The TruAudience Predictive Segmentation Framework

The TruAudience predictive segmentation framework is TransUnion's unique approach to geodemographic segmentation – a multivariate statistical classification technique for market segmentation that leverages geographic information systems and database management software information technologies. The TruAudience geodemographic segmentation schema is differentiated by its granularity and proprietary data.

The TruAudience predictive segmentation framework is a granular and actionable segmentation schema. It consists of 172 mutually exclusive micro-segments that collectively describe every household in the United States. These micro-segments are defined using a "bottom-up" methodology (multivariate agglomerative clustering) in

which all consumer data is first considered in its most detailed form; each data point is defined as a unique cluster; and clusters are combined in an iterative fashion if they exhibit similar characteristics. The micro-segments are optimized for stability, yet each only describes 0.5% of the US population on average.

Each household in the United States is classified to a single micro-segment based upon six distinct attributes which are important determinants (or "key drivers") of consumer behavior: Age of head of household, household income, presence of children, homeownership, cost of living, and "urbanicity."



Importantly, each of these attributes is available for close to 100% of US households within TransUnion's extensive data repository. Thus, TransUnion can more accurately place consumers into 1 of the 172 TruAudience segments based on household level demographic information – not geographic averages (such as Zip Codes or ZIP+4s).

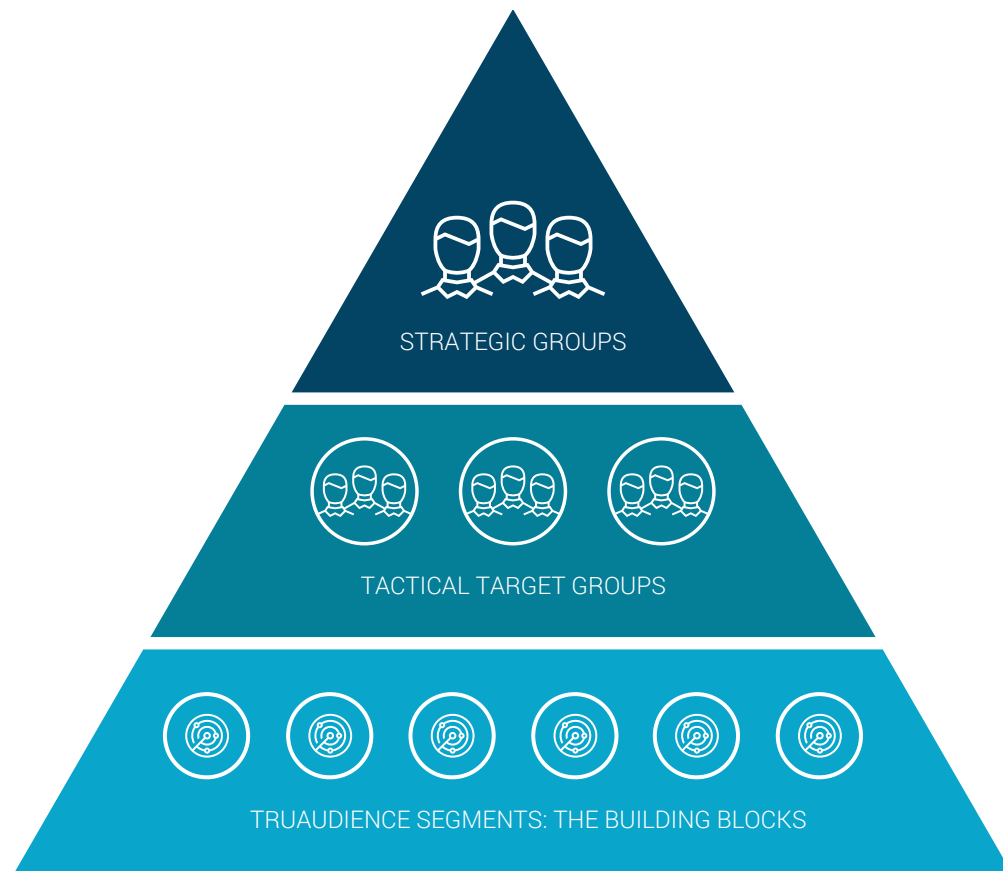
Segmentation Model Customization

Unlike traditional “off-the-shelf” segmentation schemas, the TruAudience predictive segmentation is not a one-size-fits-all approach.

The TruAudience predictive framework enables the development of custom segmentation solutions built specifically to address the needs of individual marketers. Custom segmentation solutions are created from the foundational micro-segments by continuing the agglomerative process but adding in marketer-specific behavioral attributes. Micro-segments are combined if they exhibit similar demographic, attitudinal or behavioral characteristics, as well as similar product propensities or needs for marketer-defined behaviors. The result is a custom segmentation defined by shared demographic characteristics — optimized to predict marketer-specific consumer behaviors.

Additionally, because needs vary throughout an enterprise, the TruAudience predictive segmentation framework provides a flexible mechanism to “roll-up” segments for different organizational use cases. Segments are designed to be used like building blocks to create unique target groups. Distinct target groups can be built to service all tactics, as well as derive higher-level, strategic insights. The typical use case utilizes 25–50 tactical segments and 5–9 strategic groups that are optimized for broad enterprise applications (e.g., who are the best customers for my business? Who are the most valuable customers?).

Manual segment grouping is available as an alternative option for custom segmentation development. This method allows for manually combining segments for specific tactical applications, often using a more limited set of variables. It is best used for very specific purposes, such as identifying segments most likely to respond to direct mail.



CASE STUDY

A Leading Retail Bank Achieves Greater Level of Customer Understanding Through Segmentation

A leading retail bank came to TransUnion looking for help with a challenge we all know too well... many visitors come to its website, but only a tiny fraction of them actually convert. And, the bank knew next to nothing about this vast majority of non-converting visitors.

Step 1: Collect the data

TransUnion can collect and identify many types of online or offline data. In this case, since the bank was interested in learning more about its unauthenticated website visitors, we launched a “website listening period” to learn more about site visitors. We also onboarded its offline customer file — which allows us to match the unknown visitors to existing customer profiles. This client wanted to understand to what extent it could identify unauthenticated traffic to its site. Our 72% match rate in this case exceeded the bank’s expectations.

Step 2: Validate the opportunity

We then validated the extent to which we could uncover actionable insights. We developed predictive models of both likelihood to visit and likelihood to convert, and found significant segment differentiation for each within a flexible framework, enabling scalability and manageability.

Step 3: Identify high-value targets

From there, we identified high-value (and low-value) consumer segments to assist our banking client in determining how to prioritize marketing accordingly for long-term value. So, we further explored this client’s converters and identified its high-value segments. We completed this analysis for each of its

core products (checking and savings accounts), and identified four distinct target segments based upon propensity to buy — by product preference:

1. Low checking, high savings
2. High checking, high savings
3. Low checking, low savings
4. High checking, low savings

Step 4: Drive actionable insights

The next step was describing the target groups in terms of insights pertinent to specific marketing use cases. We helped our banking client understand the potential for each segment — or differences in segment value — so it could determine how best to allocate limited time and resources. With further exploration and analysis into each of these high-value segments (within TruAudience Consumer Insights), we uncovered attributes that varied across groups, and created profiles of these high-value segments, describing who they are and how to reach them. The outcome: A series of actionable insights for differentiated targeting and personalized messaging.

For example:

- Market savings products via price-based incentives
- Emphasize soft features, such as customer service and no-hassle banking

The TruAudience Consumer Insights Platform

To simplify segmentation, TruAudience Consumer Insights includes a powerful, easy-to-use platform for real-time data exploration, visualization, reporting and custom segmentation model development. It supports a broad variety of tasks, including:



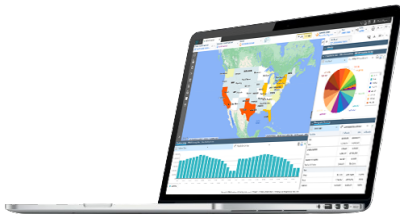
Data import and manipulation

- Importing your own data for analysis – including customer transactional data, campaign response data, site data (e.g., actual or proposed store locations) and trade areas – manually or automatically
- Appending and managing data for analysis
- Coding your customer data by appending latitude/longitude and TruAudience segment codes



Data exploration and analysis

- Customization of variables
- Creating various types of target consumer profiles
- Creating custom target audience groups
- Calculating a range of data metrics to support analysis, including counts, penetration and composition rates and indices



Data visualization and mapping

- Visualizing data using interactive charts, bar graphs, grids and maps
- Mapping customers, sites and markets by geography – using standard geographic boundaries or your own custom geographic footprint



Reporting

- Generating preconfigured reports and maps, or downloading data for analysis outside the system
- Creating customized report templates and dashboards



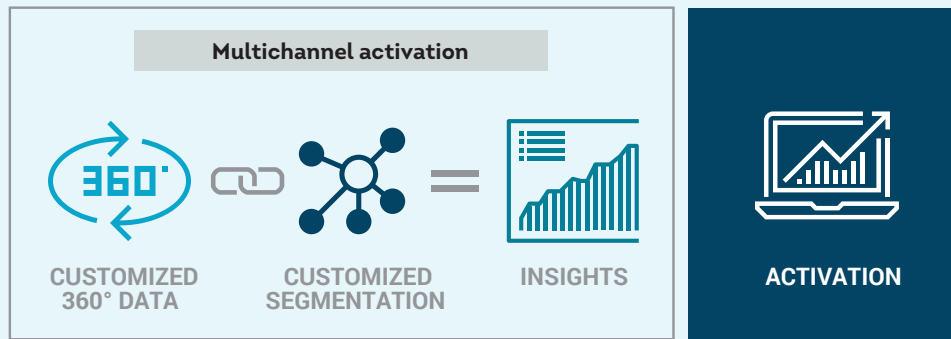
Permissioning and customization

- Setting permissions for different users
- Personalizing the system with different user and company preferences

Activation

- Audiences can be activated anywhere TruAudience AdAdvisor is available

Segmentation Activation



Of course, none of this matters if you can't act on segmentation-derived insights. This is where traditional segmentation solutions fail most often.

TransUnion's approach is founded on being able to link all identifiers to enable omnichannel insights and activation. Via TransUnion's authoritative identity system, all identifiers (of 250M+ individuals and 125M households) are linked to a unique, privacy-friendly, omnichannel TransUnion ID. This privacy-friendly identifier can be used to target across the online presence of all 250M+ marketable US adults and more than 1 billion device identifiers, enabling you to activate your insights within your online marketing program.

Additionally, TransUnion's identity graph for marketing solutions allows you to standardize your target profiles across all channels. Each TruAudience segment is available as an audience within TruAudience AdAdvisor, TransUnion's curated audience taxonomy, making it seamless to segment your audience, inform marketing decisions, and then activate across any or all digital marketing channels. That means you can segment and target consistently and relevantly.

Summary

How can marketers combat a fragmented marketplace, highly diversified consumer media consumption habits, higher media costs, diminishing consumer response and increased consumer expectations for relevancy, personalization and consistency?

With a modern segmentation solution that's customizable, precise and actionable.

TruAudience Consumer Insights allows marketers to examine who and how they target, and build a deep understanding of their customers and prospects in order to develop proactive marketing strategies aligned with the nuances of their unique businesses. This enables marketers to:

- **Derive predictive models to generate insights that yield competitive differentiation**
- **Aggressively cut wasted marketing spend by prioritizing efforts to reach only those consumers with a propensity to become customers**
- **Maximize reach against your most valuable target audiences via data-driven market and media planning**
- **Improve advertising effectiveness via personalized, persuasive communications — informed by a deep understanding of these high-value customers and prospects**

By focusing resources on developing personalized, persuasive communications — informed by predictive models and targeted to consumers who show potential to convert — marketers can maximize the return on their marketing investments.

The TruAudience difference

Granular and authoritative: Leveraging outdated data is a detriment. Identity and relevancy are paramount.

- TransUnion's authoritative identity data is updated up to every 15 minutes.
- The TruAudience predictive segmentation framework is TransUnion's granular, predictive segmentation model that's foundational to all TruAudience Consumer Insights solutions.

Deep and robust: Limited data can be misleading as to the nature of your consumers.

- TransUnion provides over 15,000+ attributes for customer understanding, day one.
- Include an unlimited number of additional attributes derived from your CRM, partners and external market research to strengthen awareness of wants and needs.

Customized: A "one-size-fits-all" model is not sufficient.

- The TruAudience schema can be used as-is but was built for customization.

Actionable: Insight that's not actionable is essentially useless.

- TransUnion's approach is founded on being able to link all identifiers to enable omnichannel insights and activation.
- Use your channels together: call center, DM, email, site, display, in-person and addressable TV, and not only implement but compare exposure to actions taken.

Easy: Insights mean nothing if you can't find them.

- TruAudience Consumer Insights enables rich, real-time analysis, and TransUnion Consulting Services experts provide custom business solutions and rapid success. The platform is updated quarterly and is securely cloud-based.

TruAudience™

To learn more about how TruAudience Consumer Insights can help you build a better understanding of your customers, visit us at:

www.TransUnion.com/TruAudience-Insights

About TruAudience marketing solutions

TruAudience marketing solutions power data-driven marketing and measurement with an end-to-end suite of privacy-enhanced identity resolution, data enrichment, consumer and media insights, audience targeting and advanced analytics solutions.

In the face of data deprecation and privacy regulations, TruAudience marketing solutions make it possible for marketers to improve actionability across the addressable marketing ecosystem. TruAudience solutions help marketers develop a robust view of consumer identity; make strategic marketing and business decisions based on consumer insights; create powerful new audiences based on credit-informed and non-credit attributes; reach those audiences across today's fragmented media ecosystem; and measure and optimize their campaigns at pace.

<https://www.transunion.com/TruAudience>

About TransUnion (NYSE: TRU)

TransUnion is a global information and insights company that makes trust possible in the modern economy. We do this by providing an actionable picture of each person so they can be reliably represented in the marketplace. As a result, businesses and consumers can transact with confidence and achieve great things. We call this Information for Good.®

A leading presence in more than 30 countries across five continents, TransUnion provides solutions that help create economic opportunity, great experiences and personal empowerment for hundreds of millions of people.

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