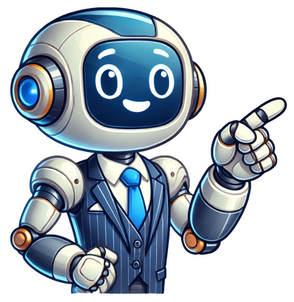
I'm not a robot



Key TakeawaysComplete, accurate, and structured behavioral data is valuable for improving customer experience (CX). It can provide insights into customer interactions, preferences, and habits through various activities like website visits, social engagements, and purchase history.It's collected from sources like CRM systems, websites, mobile apps, and social media platforms. It is categorized into first-party, second-party, and third-party data, each with its own benefits and uses.Utilizing behavioral data enables businesses to personalize marketing campaigns, identify and optimize customer journey friction points, develop forecasting and benchmarks, and boost engagement, although it must be managed with stringent privacy and ethical considerations.What is behavioral data?Behavioral data describes user interactions with digital environments, revealing detailed preferences and patterns. It is a foundational element for personalization and enhancing predictive models across numerous applications.Customer behavioral data unlocks a treasure trove of information about how customers move through your business's website or app, revealing potential user sentiment signals or speed bumps along the digital experience.Alongside demographic data, this data is generated by user interactions online, such as:website viewsnewsletter sign-upsshopping cart activitiessentiment signals, like rage clickssocial media engagementsIt’s like a digital breadcrumb trail that customers leave behind, revealing their preferences and habits and allowing businesses to significantly improve the value of their existing systems, such as analytics, personalization, product forecasting, A/B testing, and marketing automation.Gauge your team’s behavioral data readiness and find practical steps to elevate your data approach.Get the insightsWhere is behavioral data collected?Businesses leverage a variety of digital platforms and tools to gain a comprehensive understanding of customer behavior. These systems not only track user actions but also provide valuable insights into preferences and experiences.Marketing automation and CRM systems: Collect data on user interactions, purchase history, and preferences.Websites and mobile apps: Utilize pixels and tracking technologies to capture browsing behaviors and user engagement metrics.Billing systems: Reveal customer payment patterns and preferences, adding a financial dimension to user behavioral data.Call centers: Offer direct insights into customer inquiries and service experiences.Social media and surveys: Enrich understanding by capturing user preferences and feedback directly from the source. Types of behavioral dataThree main types of behavioral data exist, each with a unique role in decoding customer behavior:First-party data: Collected directly from customers, offering unparalleled reliability and insight into customer behaviors, preferences, and actions. This builds a foundation for personalized marketing and customer experience enhancement derived from direct interactions like purchases, abandoned carts, and website visits.Examples of first-party data:Website clicksApp usage timeCRM dataSecond-party data: Acquired through partnerships, second-party data is another company's first-party data shared or sold for mutual benefit. This data extends marketing reach by accessing insights from similar customer bases, therefore enriching understanding without direct collection.Examples of second-party data:Data purchasesPartnership dataIndustry consortiumsThird-party data: Sourced from external aggregators or brokers, this data provides a broad view of market trends and consumer behavior across various sources. It is valuable for broad market analysis and identifying general trends, albeit less directly relevant to individual customer actions.Examples of third-party data:Demographic informationBehavioral patterns across various platformsPurchase history from external vendorsBehavioral analytics tools turn data into actionTools like Fullstory and Google Analytics function as the core components in the machinery of data-driven decision-making, facilitating behavioral analytics.Google Analytics tracks user behavior across devices, offering detailed reports.Fullstory deciphers hidden buying behaviors, equipping data teams to boost revenue with immediate personalization and predictive analysis. It surfaces the sentiment behind the clicks, aiding businesses in crafting superior experiences that secure lifelong loyalty.These platforms specialize in providing insights into conversion, engagement, and retention without complex queries. Behavioral data analytics tools employ advanced methods like cohort and funnel analysis to study user retention and conversion paths, enhancing customer experiences by combining qualitative feedback with quantitative data and tailoring offerings based on user activity metrics. Behavioral data in marketing automation systemsMarketing automation systems utilize behavioral data as their powerhouse to craft personalized experiences for customers.They trigger actions automatically following specific behaviors, thereby creating a seamless and personalized customer journey. By providing consistent messaging across multiple channels, these systems ensure a coherent brand presence, playing a vital role in customer acquisition in today’s multi-channel environment.Behavioral data is instrumental in achieving business goals such as new customer acquisition, user retention, and minimizing churn rates. It builds trust and grows conversion rates.Personalization campaigns that analyze customer behavior data like browsing history and purchase patterns allow marketers to send messages tailored to individual customer preferences. At the same time, segmentation enables more targeted and effective marketing strategies. This approach aligns closely with broader marketing analytics practices, enhancing overall campaign effectiveness.Enhance user journey using customer dataEnhancing the customer journey stands out as a key application of behavioral data. It involves using personalization strategies, identifying friction points, and boosting user engagement to improve overall customer experience.Let’s dive a bit deeper.Personalization strategiesPersonalization is no longer a luxury but a necessity.Customers expect brands to understand their preferences and buying habits, and deliver personalized experiences. Organizations leverage behavioral data to understand customer behavior and create targeted segments, enhancing personalized marketing campaigns and improving customer experience.Take Coca-Cola’s use of image recognition for targeted ads as an example.This strategy has succeeded in increasing engagement, cautioning against over-personalization, and emphasizing the importance of allowing opt-out from personalized experiences. Product recommendations tailored to customers based on their past behaviors exemplify an effective personalization tactic contributing to increased interest and potentially higher sales.Identifying friction pointsPotential friction points, areas causing discomfort or frustration, are inherent in every customer journey. By analyzing behavioral data and surfacing the customer sentiment behind the clicks, businesses can work towards optimizing these friction points.Behavioral data platforms like Fullstory offer the following benefits:Collect data on user behavior patternsIdentify and alert about user friction in a user experienceImprove customer satisfaction and engagementLead to a more successful customer journeyBoosting user engagementBoosting user engagement is a critical goal for many businesses, and behavioral data is often the missing link that breaks down the barrier to success.A heatmap tool, for instance, provides visual illustrations of user behavior on a website. These illustrations are critical in identifying areas that receive the most engagement and those that are ignored. Feedback and voice of the customer tools offer insights that may not be apparent through quantitative data alone. Constantly enhancing the user experience based on insights from behavioral analytics plays a key role in fostering user loyalty and improving engagement.Privacy and ethical considerations in behavioral data collectionAs is true for any form of data collection, gathering customer behavior data carries its own privacy and ethical considerations. Behavioral tracking is governed by stringent regulations such as GDPR in Europe, CCPA in California, and PIPEDA in Canada, which mandate explicit consumer consent and the protection of personal information.Around 40% of consumers lack trust in how brands handle their data, underscoring the urgent need for complete transparency and ethical practices in the use of behavioral data to prevent brand trust loss.Practices like data manipulation or lack of transparency can lead to severe outcomes, including legal repercussions and fines, as well as a tarnished brand reputation.Examples of businesses using behavioral dataTo fully grasp the potential of behavioral data, let's consider some real-world examples. Organizations leveraging behavioral data analytics see 85% more sales growth and a more than 25% increase in gross margin. By analyzing data, they can make informed decisions and optimize their strategies. McDonald’s, for instance, has used behavioral data acquired from Dynamic Yield to optimize their high-volume business, effectively increasing customer satisfaction and sales.DBS Bank’s investment in technology, including AI and data analytics, has transformed it into a data-driven organization, significantly improving the user experience.Starbucks and Netflix have also benefited from the strategic use of behavioral data to tailor offers, shape product development, and strengthen customer relationships.Applying behavioral dataBehavioral data unlocks the power of true personalization by revealing valuable insights into customer sentiment patterns.By understanding your consumers' personalities through their actions, you can tailor your strategies to not just meet but match their moods, making every interaction deeply personalized and effective.Improve customer engagementBusinesses use behavioral data to understand customer patterns such as page views and interactions. By analyzing how customers engage with digital platforms, companies can create personalized experiences.Tools like recommendation engines leverage this data to suggest products, enhancing the customer's journey and interaction with the brand.Data-driven product developmentInsights into customer behavior significantly enhance product development. Companies leverage feedback and purchase patterns to refine new features or products. Integrating AI with a behavioral data platform further sharpens this targeted approach.AI engines process and analyze data more deeply, revealing trends and sentiments that inform development strategies. This ensures efforts are not just aligned with, but also predictive of, actual customer preferences and needs, making development more responsive and tailored.Optimize sales and marketingSales and marketing campaigns are tailored using predictive lead scoring and segmentation based on customer activity. This targeted approach can result in more effective campaigns and higher conversion rates. Marketing automation systems utilize behavioral data to fine-tune advertising and lead-generation strategies.Enhance customer retention and loyaltyThe analysis of customer interactions and purchase history informs strategies aimed at increasing lifetime value and reducing churn. Personalized email sign-ups and newsletter subscriptions are examples of how a Customer Data Platform (CDP) can foster loyalty and encourage repeat business.By strategically applying behavioral data across various facets of a business, companies can enhance customer experiences, resulting in improved engagement, more efficient product development, and increased sales and customer loyalty.Maximize impact with behavioral dataBehavioral data is pivotal today. It reveals customer preferences and guides marketing strategies. It enhances customer journeys and campaign effectiveness while upholding ethical standards.Leveraging this data effectively drives informed decisions and business success.User behavior data includes tracking customer engagement across different touchpoints, such as social media, email marketing campaigns, and online purchases. This data helps understand customer preferences and customize marketing efforts accordingly. Additionally, key metrics like bounce rates, page views, time spent on pages, and user flow aid in identifying areas for improvement. Data behaviorism refers to information that provides insights into the actions, decisions, patterns, and habits of consumers when engaging with products, services, or platforms. It reveals trends associated with individual behavior.Behavioral data in CRM refers to information gathered about customers' interactions with a business across various channels, including website clicks, mobile app usage, online purchases, email engagement, and in-store foot traffic.Behavioral data is a key resource for multiple roles. Marketers refine campaigns, product managers enhance offerings, sales teams personalize engagement, and customer service anticipates needs. It informs leaders' strategic decisions, benefiting anyone involved with customer interactions.Privacy and ethical considerations in behavioral data collection include the need for explicit consumer consent, protection of personal information, and the requirement for businesses to maintain transparency and ethical practices (date not needed).7 behavior analytics tools for enterprise user insights [2025]Discover the leading enterprise behavior analytics tools built for scale, precision, and actionable behavioral data—one of which is a clear standout.Read the blogA new era of behavioral data—powered by AI for customers and teamsFullstory expands its portfolio with new AI-driven solutions, helping teams collect, analyze, and act on behavioral data faster and more effectively.Read the blogAI-powered co-shopping with Fullstory and QuantiphiAI-powered co-shopping with Fullstory and Quantiphi uses real-time behavioral data to personalize shopping and guide customers with a smart chatbot.Read the blog Every good company tries to do two things: create great customer experiences and drive more revenue. In order to do that, they need to know how their customers are engaging with their product and services, what people gravitate towards, and where people get stuck. That's where behavioral data comes into play. In this article, we’ll explore: What is behavioral dataHow do you collect behavioral dataTypes of behavioral dataWhat are the use cases for behavioral dataWhat are some examples of behavioral data tools What is Behavioral Data? Behavioral data represents the customer interactions you capture across your website, apps, and servers. These interactions can include page views, new signups, purchases, logins, or any other action a customer might take when interacting with your business or product. Collecting these customer interactions helps you understand your customers better to uncover hidden preferences and behavioral tendencies to better deliver personalized experiences. With behavioral data, you can also analyze past behavior to predict future trends and ultimately guide your users down a specific customer journey tailored uniquely to their needs and desires. What is Behavioral Analytics? Behavioral analytics is the act of collecting and modeling behavioral data. Behavioral analytics aims to reveal insights about how and why users behave in certain ways so you can deliver more personalized experiences to your customers. Where behavioral data is the type of data you collect, behavioral analysis is the art of concluding the data, which leads you to produce actionable insights. Some common goals of behavioral analytics are to improve conversions, retention, and engagement. How Do You Collect Behavioral Data? You collect behavioral data through a process called event tracking. Event tracking captures user interactions across web and mobile applications, where each interaction has a timestamp and the specific event, like page viewed, login, purchase, or click, is noted. Software Development Kits (SDKs) power event tracking. SDKs let you embed code snippets powered by JavaScript directly on your website or app, where you can set up triggers based on the user action you wish to track. The data collected when a user performs an action is stored in your analytics database or data warehouse, ready for behavioral analytics. Types of Behavioral Data You can track multiple types of behavioral data, depending on your goals. Some of the most common types of behavioral data include interaction-based data, content engagement data, e-commerce data, and authentication data. Interaction-based Data Interaction-based data captures the direct actions users take when interacting with digital interfaces. This can include: Clicking a button: Tracks click frequency and locations.Scroll depth on a webpage: Tracks user scroll depth.Submitting a form: Monitors form completion.Length of watching a video: Captures user watch time.Hovering over an element: Monitors cursor hover activity. Content Engagement Data Content engagement data reflects how users interact with various content types. This can include: Viewing a webpage: Tracks time spent on page.Downloading a file: Tracks downloads of resources like PDFs or eBooks.Searching: Records search keywords and semantic phrasesEngaging with content: Captures actions like commenting, sharing, or liking content. E-commerce Data E-commerce data provides insights into shopping behaviors and trends. This can include: Making a purchase: Tracks completed transactions.Adding an item to cart: Monitors items added to cart.Viewing a product: Measures views and time spent on product pages.Abandoning the cart: Identifies items added to cart with no purchase. Authentication Data Authentication data tracks user actions related to their account access. This can include: Signing up: Records user account sign-ups.Logging in: Tracks frequency and patterns of user logins.Logging out: Tracks logouts and user session durations. What are the Benefits of Behavioral Data? You would want to capture behavioral data in your business for four major reasons. Predict customer behavior: You should consider behavioral data as your crystal ball. It can build a customer journey map to see what behavior leads to a particular outcome. Once you have these insights, you can make improvements to prompt the right behavior and send relevant messaging to customers at the right time.Understand your customers: Have you ever wondered why customers aren’t buying? Or not engaging with a certain feature in your app? Behavioral data can help you understand the nuances behind their thinking process. The data shows a window into what a customer is doing and what's causing unwanted behavior, like abandoning their shopping cart and failing to complete a purchase.Gather customer feedback: Getting customer feedback helps you know where you're succeeding and failing. You can also use behavioral data as a trigger if you have a specific area where you’re looking for real-time feedback.Provide evidence: There could be times you want to improve your site or app but need evidence before rolling out a change/update. Behavioral data can provide you with evidence and show if a customer is having difficulty navigating through your website or app. What are the use cases for Behavioral Data? Once you have behavioral data in hand, you can use it to power a variety of use cases across marketing, product management, and even data analysis to uplevel the customer experience and optimize the customer lifecycle. Marketing Use Cases Marketing teams use behavioral data to unlock a wealth of opportunities for optimization and targeted strategies. Find the most valuable channels or campaigns: Behavioral data lets you determine which channels or campaigns perform best by seeing which ones align with your goals the most. With this information, you can reduce spending on underperforming channels and campaigns and divert that money into the more successful ones, resulting in more profitable advertising.Create lookalike audiences: Lookalike audiences can help you draw new customers to your business. You can create a high-value audience with behavioral data, such as customers with a lifetime value of over $500. By sending those customers to advertising platforms like Facebook or Instagram, you create lookalike audiences. These customers have characteristics similar to those you provided, which should improve the chance of conversions in your ad campaigns.Increase retention: Behavioral data can help you analyze the behavior of your best customers to determine how to increase retention, acquire more loyal customers, and apply those learnings to other customers. Product Management Use Cases Leveraging behavioral data can help you enhance the user experience and increase product growth. Identify behaviors that lead to reduced churn: With behavioral data, you can identify the small actions that lead to a customer churning over a long period. For example, you could find that customers who aren’t opening emails, never access the help center, and only use one of your features are highly likely to churn. Knowing this, you can develop new processes to combat customer from taking these behaviors or offer incentives to change their behavior.Create a customer journey map: A customer journey map helps you reveal the user experience, pain points, and preferences. Behavioral data provides the touchpoints and interactions needed to create a customer journey map. With a customer journey map, you can use it to guide your product development and areas for improvement backed by data.Gather feedback based on user engagement: When launching a new feature, you want to ensure it works. Behavioral data can provide instant feedback on what is working and what isn’t. It also gives you the data you need to understand what improvement may be needed and what should be a top priority. Data Analysis Use Cases Behavioral data is a cornerstone for insightful, real-time decision-making and customer understanding. Collected complete customer data for comprehensive analysis: Behavioral data is often the missing piece of customer data. Collecting first-party data such as name, email address, and location is standard. However, behavioral data enables you to create a Customer 360 for detailed customer analysis.Enables data-driven decisions: Because of Customer 360, data analysts can make decisions that are fully formed by user actions and preferences. With all the data available, you can create more effective strategies, have better customer targeting, and predict the future behavior of customers.Conduct real-time analysis: Because you capture behavioral data as soon as the event happens, you can perform real-time analysis. Receiving this data nearly instantly means you can respond to customer behavior quickly. You can capture behavioral data by building your own solution, but tools that simplify implementation and include additional features are available. Hightouch Hightouch is a Data Activation platform that helps you get customer data to any tool. The platform provides powerful features to collect and resolve customer identities in your data warehouse and sync data to any ad or lifecycle platform. Hightouch Events helps you collect behavioral data from websites, mobile apps, servers, or any other point of customer interaction and load it into the data warehouse. Hightouch also offers tracking SDKs across the web, mobile, and server-side languages that you can deploy in minutes to start tracking behavioral data across your web and mobile apps. Hightouch Events Heap Heap is a low-code, easy-to-use digital analytics platform that helps you track user behaviors and allows you a user-friendly method to analyze insights. The platform has a simple-to-implement event tracking system that eliminates the pain of any manual tracking with this Autocapture product. Autocapture automatically tracks all the events without you having to add an event code for each event manually. Heap lets you enrich your event data with additional metadata via APIs, capturing client and server-side events. One of Heap’s standout features is its retroactive data analysis capability, allowing you to view past data without prior specific event tracking. Its automated data collection saves significant developer time and provides a complete view of the user journey, enhancing decision-making with detailed user data. Heap dashboard source HotJar HotJar allows you to view how a user behaves on a certain webpage by recording their interactions and allowing you to watch their behavior in a recorded session. The toolkit includes heatmaps to visually represent user interactions on a site, session recordings to observe user behavior, and feedback tools like polls and surveys for direct user feedback. The platform can help you deliver a better user experience and gain direct customer behavioral insights. Hotjar home dashboard Amplitude Amplitude provides analytics for mobile and web platforms, providing insights into user behavior and product performance. The platform offers real-time analytics for immediate user behavior insights and cohort analysis for segmenting users by behavior and characteristics. The Microscope feature allows for an in-depth examination of individual user journeys. Amplitude also lets you personalize user online engagement, provides insights for future trends, and helps you inform product decisions from user behavior data. Amplitude dashboard - Source Segment Segment operates as a conventional Customer Data Platform (CDP) focusing on event collection and data utilization. It helps you gather data from various sources such as websites, mobile applications, servers, and cloud-based applications. Once collected, Segment automatically syncs this data to a range of downstream destinations. The platform offers four main products: Connections, Protocols, Unify, and Twilio Engage, enabling effective audience management, real-time data utilization, and integration with business tools for personalized marketing strategies. Segment workspace source Final Thoughts Behavioral data is crucial for understanding the “why” behind customer actions to help you drive growth in your business. From predicting customer behavior to providing real-time feedback, the insights derived from behavioral data are invaluable. If you want to learn more about collecting your own behavioral data, book a demo to learn how Hightouch can help you start capturing behavioral data today! Behavioral data refers to information collected about customers’ actions when interacting with your business across channels – their website clicks, mobile app usage, online purchases, email engagement, and even real-world interactions (e.g. in-store foot traffic). Behavioral data collected and owned by your business is primarily first-party data, which is valuable for achieving accurate customer insights. What differentiates behavioral data from other types of data is that it reveals why users behave the way they do rather than just what they are doing. This powers data-driven decision-making across your organization regarding optimizing product offerings, website experiences, marketing campaigns, and more. Ultimately, behavioral data enables you to grasp what customers expect from your product and deliver more personalized, relevant experiences. Behavioral data vs. other data types Behavioral data represents real, observable actions customers take across both digital and physical environments. This information directly signals what customers do and eliminates the guesswork around their intentions. Behavioral data can be obtained from both online and offline sources. Website interactions: clicks, searches, page visits and video views. Mobile and web app usage data and metrics. Ecommerce store interactions: adding an item to a cart, abandoning a cart, creating an account and canceling an order. Form submissions. File or app downloads. Email metrics: open, click-through and unsubscribe rates. Customer service interactions across channels. Point-of-sale (POS) and transactional data. Social media interactions: likes, reactions and comments. Product reviews. In-store purchases and returns. Foot traffic patterns and in-store interactions. Call center conversation topics. Event participation and engagement. Loyalty program activity. Service and consultation appointments. The first-party nature of most behavioral data makes it useful for brands looking to better understand their customers. Because first-party data comes from direct customer interactions, it is highly actionable for optimization and inherently compliant with privacy laws if managed responsibly. Compared to third-party data, the use of which has been a growing ethical and regulatory concern, transparent first-party behavioral data collection minimizes various errors and misuse risks. Businesses gain invaluable insights into customer preferences, needs, pain points, and expectations by analyzing the myriad of their interactions – from browsing patterns on a website to purchase histories. This data allows companies to tailor their products, services, and marketing efforts to better align with customer behavior. Such alignment not only enhances the customer experience but also drives business growth through increased loyalty and sales. In essence, behavioral data acts as a compass guiding businesses toward more customer-centric strategies.Here are a few areas where behavioral data proves useful: Targeted marketing campaigns: Businesses can use customer data insights in other systems, such as CRM or marketing tools, to target customers with personalized content and offers. Cross-sell and upsell opportunities: Understanding past purchases and preferences allows for targeted cross-selling and upselling, enhancing customer value. Optimizing sales processes: You can boost your customer acquisition and retention efforts, reduce churn, and improve customer LTV. Personalized customer experiences: User behavior will tell you what content people read, which pages are most popular, how people navigate between pages, and what they look for using site search. With this data, you’ll know how to structure information for easy navigation. Insights for product development: Behavioral data is a trove of information on ways to make your products better. Improved customer conversion and retention: Tracking the customer journey enables targeted interventions at different stages, enhancing conversion and retention strategies. This is especially important for product teams trying to better understand users and improve their experience. Enhanced customer support: Behavioral data aids customer support teams in identifying friction-heavy touchpoints and providing tailored and effective support where needed. Identifying high-value customers to sell more: By analyzing purchasing habits and engagement, ecommerce businesses can segment users to target and nurture the most valuable ones. Churn prevention: Behavioral data about product usage can help identify customers at risk of churning, allowing for proactive engagement and retention strategies. Companies can use behavioral data analytics to understand what people do on a website, from when they first visit to when they buy a product. This helps businesses identify what makes customers go through with a purchase and what stops them from buying. Equipped with this information, they can make their websites more appealing to what customers want, increasing their satisfaction and loyalty and making them more likely to spend money.Behavioral analytics is also great for spotting the most valuable customers. This allows companies to apply their marketing resources where they offer the best return. Also, by understanding what customers like, companies can personalize their content to each customer. This helps grab their attention and encourage them to return in the future.Lastly, behavioral data is useful for maintaining customers. By learning what customers buy and what they like, companies can devise smart ways to keep them interested and stop them from going to other brands. This is crucial for maintaining a steady group of loyal customers to nurture. Using first-party behavioral data for customer insights entails specific governance, analytical, and ethical challenges. With the growing variety and volume of data gathered across platforms and environments comes complexity – and without careful management, missteps occur.Failing to mindfully collect, resolve, store, analyze, and activate behavioral data can undermine analytics accuracy, regulatory compliance, and customer trust. Here is how organizations can address the challenges of collecting and using behavioral data: ChallengeSolutionCompliance with privacy laws (GDPR, CCPA and others)Implement a comprehensive data management platform that ensures compliance with privacy laws. This could include features for consent management, data access, and permission control.Respecting consumer advertising preferencesUtilize preference management tools to track and honor consumer choices, aligning with “Do Not Sell” and “Do Not Track” lists.Data retention schedulesDeploy automated data lifecycle management systems that enforce retention policies and schedules, ensuring timely deletion of data.Right-to-access policiesImplement user-friendly data access portals that allow consumers to view, transfer, and delete their personal data easily.Integrating data from various sourcesUse advanced customer data platforms (CDPs) for centralizing and reconciling data from disparate sources into accurate customer profiles.Maintaining scalable data infrastructureDevelop or adopt scalable cloud-based infrastructure solutions with robust data processing capabilities, such as Apache Kafka for streaming data.Filling in specialized data rolesFocus on talent acquisition and training programs to fill specialized roles like data or AI ethicists and Data Protection Officers.Cross-departmental collaborationImplement collaboration platforms and inter-departmental workflows. For example, use tools like Slack for communication and Trello for project management.Dealing with reputational risks connected with unlawful data practicesAdopt a transparent approach to data usage, with clear consumer communication strategies and open disclosure policies.CybersecurityStrengthen cybersecurity measures by using advanced security solutions, such as firewalls, intrusion detection systems, and regular security audits. You can leverage behavioral data responsibly and effectively if you: Collect explicit consent and be transparent. Communicate how the collected data will be used and obtain opt-in consent from customers when required. Prioritize privacy and security. Follow regulations like GDPR to honor user privacy rights. Implement relevant measures, such as data anonymization and appropriate security measures. Maintain data integrity. Carefully process and structure behavioral data to correct errors. Record metadata like timestamps and sources. Develop strong data governance. Document policies for behavioral data collection, storage procedures, access controls, and oversight procedures aligned with regulations. Prioritize data minimization. Treat data as a liability, not an asset. Continuously evaluate ways to collect less data while preserving analytical value. Use homegrown identity resolution. Avoid buying third-party data for identity resolution. Develop compliant strategies like zero-party data collection. Build an ethical data culture. Foster awareness and shared responsibility for using data ethically across teams via training and leadership. These best practices form the foundation for maintaining customer trust by putting their well-being first. While an investment initially, this pays long term dividends across both ethical and performance metrics. Collecting and interpreting behavioral data constitutes the basis for all analytical endeavors. The effectiveness of behavioral analytics depends on the quality and comprehensiveness of the behavioral data collected. Organizations collecting relevant, high-quality behavioral data can extract more meaningful insights through analytics. This leads to more informed decision-making across fields like marketing and product development. Behavioral analytics in marketing involves analyzing customer data to understand purchasing patterns, content preferences, and activity on different marketing channels. This approach enables marketers to create targeted campaigns, personalized content, and strategic product placements that resonate with the audience. For instance, by analyzing website visit patterns, a marketer can tailor email campaigns to specific user interests, increasing engagement and conversion rates. In product management, behavioral analytics focuses on how users interact with a product. This data helps product teams make informed decisions about design, features, and user experience. For example, by tracking how users navigate an app or website, product teams can identify pain points, optimize user flow, and enhance overall usability. This directly contributes to improved customer satisfaction and retention. Piwik PRO Analytics Suite: Analyzing data in post-login areas Managing behavioral data effectively requires specialized tools and platforms that can handle large volumes of data, integrate various data sources, and provide actionable insights. Here are some of the key types of tools and platforms for managing behavioral data: ToolFunctionExamplesCustomer data platforms (CDPs)Centralizing customer data from multiple sources into a unified database for a 360-degree customer view, segmentation and data activation.Segment, Tealium, Adobe Real-time CDP, Piwik PRO CDPData management platforms (DMPs)Managing data from third-party sources for advertising, aiding in audience segmentation and targeting.Oracle BlueKai, LotameWeb analytics toolsTracking and reporting web traffic and user behavior, providing insights into user navigation and conversions.Google Analytics, Adobe Analytics, Piwik PRO Analytics SuiteBehavioral analytics softwareAnalyzing complex user behaviors and patterns, identifying trends and predicting user actions.Mixpanel, Amplitude, Piwik PRO Analytics SuiteMarketing automation platformsMarketing automation based on behavioral triggers across various channels.HubSpot, MarketoCRM systemsManaging customer data for sales and marketing, tracking interactions throughout the customer lifecycle.Salesforce, Zoho CRMBusiness Intelligence (BI) toolsData analysis, reporting, and visualization for strategic decision-making.Tableau, Microsoft Power BIConsent management platformsManaging user consent and ensuring compliance with data privacy regulations.OneTrust, Quantcast, Piwik PRO Consent Manager A CDP is a key element in any data stack handling behavioral data. It helps businesses align with their strategic goals, compliance requirements, and operational needs. Organizations should consider several criteria when selecting a CDP to ensure the platform meets their specific needs. Look for a CDP that can easily connect siloed data sources into clear records, mapping all user traits and behaviors. This includes integration with CRM, ecommerce platforms, and data warehouses without coding. Choose a CDP that allows you to trigger audiences based on various conditions, including real-time customer interactions. The platform should offer flexibility in defining audiences, allowing segmentation based on demographic and behavioral data. Ensure the CDP can personalize customer experiences across channels and activate data to reach the right people at the right time. This involves customizing user profiles with attributes specific to your business and customers. The CDP should prioritize user privacy and help you comply with global privacy laws like GDPR, TTDSG/TDDDG, CPPA, CPRA, LGDP, etc. This includes safe hosting options, data governance, and built-in integration with consent management tools. A CDP that natively offers analytics and tag management provides a steady stream of valuable user data for more comprehensive insights. The platform should offer custom connectors and an intuitive editor for activations, catering to unique business needs without involving technical teams. Leading CDP vendors offer comprehensive professional services and customer support, including implementation, onboarding, product training, analytics consulting, and custom integrations. Piwik PRO CDP lets you divide your customer base into smaller groups based on user attributes or behavioral data. Behavioral audiences are based on the idea that customers who exhibit similar behaviors are more likely to have similar needs and preferences. By focusing marketing efforts on these groups, businesses can increase their effectiveness.Behavioral audiences can be centered around various interactions with your organization’s website or app. Below are a few examples of behavioral audiences you can create in Piwik PRO CDP and goals you can achieve by targeting them with relevant activations: GoalAudienceIncrease conversion from free to paid usersCustomers who visited the Pricing page three times in the last seven days and are on a free plan.Personalize customer experience for visitors that came from a given campaignVisitors whose first touchpoint with the brand was the Spring campaign.Increase form completion rateUsers who visited a page with loan-form in the URL in the last two hours, didn’t visit a page with request-thank-you in the URL in the last two hours, and have been inactive for 30 minutes.Increase sales through cross-sellingUsers who visited pages with laptop and charger in the URL and didn’t visit pages with headphones in the URL and made no purchase.Re-engage inactive big spendersCustomers who spent at least $5,000 in the store but haven’t performed any actions in 14 days.Encourage people to collect packages from the parcel locker soonerCustomers whose package was placed in a parcel locker in the last 24h and taken out out of the locker in the last 24h. Behavioral data shows how well you connect with your customers. When you group them correctly and reach them with the right content, they’ll feel like you’re talking just to them. And, like transactional data, you can make behavioral information work for you using a customer data platform, such as the one offered by Piwik PRO.If you want to learn more about how Piwik PRO CDP can help you make the most of your users’ behavioral data, reach out to us: Organizations use the tried-and-true method of customer behavior observation to learn about consumer purchasing patterns. Understanding your audience is essential to growing conversions, engagement, and client retention for your business. Put your behavioral data to use and let diverse teams of marketers, developers, and engineers produce captivating content, exciting products, and unique customer experiences that directly cater to your customers’ buying needs. In this blog, we will explain behavioral data, what it is, its importance types, and examples. LEARN ABOUT: Behavioral Research Behavioral data paints a clear image of your company by describing interactions with clients, partners, and your apps and systems. This information, which often appears as rows of events, can come from your digital and physical properties, including your website, apps, IoT devices, infrastructure, server-side applications, CRM, and more. A customer journey is created for each customer encounter by linking together the entities and properties—contextual information like the page and event location—contained in each event. Beyond the “what” and “how,” you need to use them to improve your business’s conversion, engagement, and retention. This has to do with how a customer interacts with your business. When you have access to your customer’s behavioral data, you can now study the “why” of their activity. For example, why does a customer gaze longingly at a specific product but fail to purchase it? A “customer” in behavioral data can be an individual buyer, a company, or someone purchasing on the company’s behalf. Here’s the important information: Whether the end user is a known or unknown entity, it is always linked to a single end user. Create memorable experiences based on real-time data, insights and advanced analysis. Request Demo Your behavioral data increases in value as your firm transitions to digital operations. It is produced through website visits, product views, purchases, content offer page downloads, newsletter signups, and other user interaction activities. Websites, mobile applications, CRM platforms, marketing automation platforms, and help desks are digital organizations’ primary behavioral data sources. Behavioral data helps you understand clients individually, strengthening your business. Combining data from your websites, apps, and devices with enterprise data can alter your marketing efforts and personalized suggestions. This lets you use this data to customize visitor and customer experiences. Utilizing a survey tool like QuestionPro for thorough analysis and feedback is the first step in offering your customers a personalized experience. This tool enables your analysts to compile your raw data into dashboards, charts, and visualizations through surveys to further examine your data and insights. With behavioral data in a pipeline, you can improve decision-making. Based on business rules, some brands seek to establish an audience of visitors who place a certain item in their shopping cart. Big data helps these corporations estimate each person’s interests and intent. Past website visitor behavior informs their projections. This is how a global technology company constructs models to anticipate which visitors would buy a specific product and add them to a targeted campaign. Activating these options for your customers at the appropriate stage of their journey, informed by the kinds of items they look at, in what sequence, and which products they choose to purchase, is the ultimate value of behavioral data. Organizations could only use data exhaust from existing SaaS solutions to use behavioral data of customers for data applications and analytics. Find out how: Exhausting behavioral data Data from several SaaS products are pulled to create behavioral data exhaust. As a result, it contains various levels of aggregation, exclusive SaaS logic, and differing degrees of quality and completeness. The result is that when this data is removed from its source, it is used in a manner it was not intended. One example would be to combine Salesforce data with pageview data from Google Analytics, which is primarily made to be viewed in the Google UI, to try and get a complete picture of reader behavior. It is necessary to separate the two data sets internal logic and structures before combining them. You wouldn’t use generic prose to explain your product to customers, so why use generic data to describe your user journeys? One-size-fits-all may not fit everyone. Data Creation is the future. It’s about intentionally creating behavioral data for each data product. Your firm can customize each metric. Predefined session lengths and naming conventions are not in the data. Your event’s contextual entities/properties can be included in the data. A good example of how to use this custom data comes from Strava, a company that makes digital wearables. They make metrics that define highly customized user journeys, such as how many minutes a user is active in a day, how many miles they run in a session, and so on. This is hard and only works well when exhaust data is used, but it’s easy to do with Data Creation. LEARN ABOUT: Buying behavior & Consumer Decision Journey Behavioral data is a valuable resource showing connections between actions, interactions, engagement, intent, and results. Even though this can be very broad or general, it can also look into more and more specific properties of users and events. Businesses and organizations must carefully draw only a few conclusions from their behavioral data or make too many claims. If data is used to train systems, like ML models, then the user properties should be looked at carefully to avoid discrimination and other forms of bias. The functions of QuestionPro go much beyond those of a simple survey program. We have a solution for every sphere of the economy and every problem. Additionally, we provide tools for managing data, like Insights Hub, our research data repository. I’ve seen countless examples of how behavioral data can make or break a company’s online presence. It’s an exciting field, but also one that’s often overlooked, despite its immense importance. That’s why I’m here to share some real-life examples that I promise, you absolutely need to know. From the power of predictive analytics to the risks of social engineering – we’ll explore how this data can make a difference in the real world. So sit back, grab a coffee, and let’s take a deep dive into the fascinating world of behavioral data.What are some examples of behavioral data?Behavioral data refers to the information that is collected about how people interact with a product, service, or platform. This type of data can help businesses and organizations understand the habits, preferences and motivations of their customers. Some common examples of behavioral data include:Web page views: Tracking the number of views on a web page and the duration of those views can help a company understand which pages of their website are most popular and engaging.Shopping cart activity: Tracking which items users put into their shopping cart, whether they complete the purchase or abandon it, and how long it takes them to make a decision can help companies improve their product offerings and make the checkout process easier and more intuitive.Social media interactions: Tracking which posts users like, share, and comment on can help companies tailor their social media strategies to target specific audiences and create more engaging content.App downloads: Tracking how many people download and use an app, which features are most popular, and how frequently users engage with the app can help a company improve the app’s usability and functionality.Overall, analyzing behavioral data can help companies gain valuable insights into their customers’ behavior and preferences, which in turn can be used to inform marketing, product development, and overall business strategy.???? Pro Tips:1. Recognize user interactions: Look for patterns in how users engage with your website or application to determine behavioral data. Observing click-through rates, session lengths, and scroll depth can reveal customer behavior.2. Analyze purchase and abandonment behavior: Track how users add items to their carts, make purchases or abandon them altogether to get insights into what matters most.3. Review browsing activity: Knowing the pages users visit and how they navigated the site can provide insight into consumer preferences and needs.4. Assess Customer Satisfaction through Feedback: An effective way to gather behavioral data is through customer feedback. Whether it be surveys or reviews, gathering data through this medium can provide valuable insight into buying behaviour.5. Monitor Social Media Engagement: Analyzing user interactions on social media platforms can reveal behavioral data such as interests and preferences, making it a valuable source of information for data analysis.Types of Behavioral Data to CollectBehavioral data is any information that is collected based on how individuals or groups interact with a particular platform, be it a website, mobile application, or social media account. There are various types of behavioral data that can be collected. These include:Web page views: these are records of every page that a user visits on a website. These records can provide insights into user behavior and preferences.Newsletter sign-ups: data collected from individuals who have subscribed to a newsletter indicates interest in certain topics or products. Shopping cart data: these are records of items that users place in their shopping cart on e-commerce websites. This data can provide insights into purchase behavior patterns and help identify areas for improvement. Account registrations: data collected from user account registrations can provide insights into user demographics and preferences.Social media activity: data collected from social media activity can provide insights into user engagement, content preferences, and sentiment.App downloads: data collected from app downloads can provide insights into user demographics, preferences, and app usage patterns.Importance of Analyzing Behavioral DataThe analysis of behavioral data is essential for businesses and organizations to gain an understanding of their customers and stakeholders. Analyzing behavioral data can provide insights into customer preferences, pain points, and patterns of behavior. This information allows businesses to make data-driven decisions that can improve customer experience, drive sales, and increase customer retention.By analyzing behavioral data, businesses can identify key areas for improvement and make necessary changes to optimize their offerings. For example, analyzing shopping cart data can provide insights into why customers abandon their carts and what steps can be taken to improve the checkout process. These insights are invaluable in enhancing conversions to drive business growth.Web Page Views as Behavioral DataWeb page views can reveal how users interact with a website and what content they find most useful. By analyzing website views

documentation, it can require a great deal of debugging. Any discrepancy between the tracking design and the tracking implementation can cause systemic errors, and combining different data sets leaves a lot of room for human error.Modeling data at scale – Poor naming conventions, the wrong levels of granularity, overuse of calculated fields—all these things and more need to be considered when scaling your data modeling. Small problems can proliferate quickly as data sets grow.Organizational challengesCommunicating within teams – When the ‘where, how and why’ of data is not recorded systematically, data is not explainable within teams. Knowing exactly what a tracking designer intended and how the front-end dev interpreted this information can require Sherlock-Holmes-level skills and some seriously long Slack threads.Maintaining backwards compatibility – Understanding where breaking and non-breaking changes have been made to tracking is essential to maintain backwards compatibility. This represents a significant challenge for many teams. Learn more about breaking and non-breaking changes.Scaling self-serve – As teams grow, compounding complexity is inevitable (see the image below). In order to scale self-serve capabilities in your data stack, it’s critical to understand the needs of each new team member and how these intersect with the existing team. Due to the complexity of behavioral data, this can be particularly challenging.Maintaining consistency – Versioning data schemas and keeping track of these changes is a significant challenge. When data dictionaries are kept as ad hoc spreadsheets, the issue is exacerbated.Compliance challengesAs you have probably gathered, all these challenges are interlinked. If you don’t understand data lineage, data is not explainable to your teams. It also means data is not easily auditable for compliance inspections.Auditability – Retroactively making data auditable can be a nightmare for data teams, and whole quarters can be lost if planning is not done up front.GDPR/compliance – This includes the right to be forgotten, consent, storage location, information security and access, and many other data laws and regulations. When data teams don’t trust that GDPR/compliance is in place, they often take the ‘safe’ route of discarding the data. This wastes highly valuable information.How Snowplow solves for the challenges with behavioral dataTracking – First party tracking means ITP does not apply—you can track users for up to 2 years, even on Safari and Firefox.Single source of truth – Data does not need to be reconciled across sources—it’s created from scratch to match your business logic and vocabulary, and then prevalidated so it arrives in an atomic data table ready for AI and BI use cases.Lineage – Created data has 100% transparent lineage. With Snowplow, the meaning of each metric is recorded in a human and machine readable format in JSON schemas.Alignment – A centralized UI helps teams navigate the complexity of managing behavioral data, controlling permissions, showing tracking in a visual way, and managing schemas.Consistency – By using Snowplow’s Universal Data Language, you can ensure meaning is tightly documented and versioned across teams.Compliance – You have full ownership of your data. The whole Snowplow infrastructure lives on your own cloud—meaning a choice of storage location, full GDPR compliance, the option to have multiple pipelines, and the ability to record the basis for capture with each event.