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WHITE PAPER

Optimizing Customer Engagement Through Connected Data

The New Mandate in Business Data

There's one thing every business has plenty of – data. Analysts describe the challenge in terms of the "Four Vs":

- **Velocity** – Experts estimate that the amount of data generated every two days now matches the entire amount of data produced in all of history prior to 2003… but only 1 percent of that data is being analyzed and used in meaningful ways. Companies need ways to respond to this velocity by capturing, processing, storing, and accessing the right data "at the speed of the customer" through new, sophisticated, and scalable techniques.
- **Variety** – The range of corporate data has quickly evolved from basic rows and columns into numerous types, formats, and styles – from unstructured text to voice/video to images and social-media posts. It all can deliver value if properly managed.
- **Volume** – Thanks to these proliferating data types along with velocity drivers such as web streaming and IoT data, the sheer volume of data is growing hourly, and the scale of it is overwhelming even the most sophisticated IT infrastructures.
- **Veracity** – Business professionals need confidence that they're basing decisions on accurate and complete data, and they need innovative ways to make that data even better by enriching it with second- and third-party data to build richer composite views.

There's also an elusive and perhaps most important "fifth V" – value. Incoming data has value, but there is also an opportunity to derive higher value requiring us to rethink how we unify these bigger and faster waves of data. It is imperative to put them in a state that the business can use – at the right place and at the right time – for the businesses to improve their in-line operational decisions.

Today's businesses want a complete unified view of their customers that incorporates all data sources and types to drive the most relevant customer decisions. This requires a persistent, progressive, and enriched profile that spans email, the web, call center, mobile, and social platforms along with marketing, sales, service, and e-commerce units. These types of customer decisions and the value they create will fall short if they don't first resolve the challenges of the four Vs. If questions arise about the quality, completeness, accuracy, and timeliness of the data, the value of that data will never be tapped.

Understanding the Types of Data

One of the keys to addressing the new mandate for business data is to acknowledge the breadth of the data that's available – and required – to be analyzed across the enterprise. Analysts define data in three levels:

- **First-Party Data** – This is the traditional structured data that's captured by an organization and carefully managed and analyzed through a growing range of transactional systems such as CRM, e-commerce, customer service/call center systems, loyalty applications, POS systems, and interactive kiosks. While necessary, it's no longer sufficient for the types of analyses and insights that companies now require. Whether data about customers, members, patients, policy holders, accounts, or products, first party data serves as the cornerstone of your "Golden Record."

  The Internet of Things – with its billions of smart, connected devices and sensors – can also add richness and context. Imagine a customer using a mobile shopping app on a smartphone, walking into a store, breaking a geofence, and receiving relevant push offers in real-time – all with permission and identification. Or imagine a single-cup coffee brew appliance capturing a complete set of granular consumption data and combining it with other data to generate pinpoint offers.

  With all of this first-party data, the challenges are threefold. The first is resolving the identity of the user across multiple devices, channels, and systems: Can you identify the single user who interacts with you using a smartphone and a tablet and then appears in-store? The second challenge is persisting that identity when, for instance, the customer moves or changes marital status. You want to avoid any breaks or restarts in a longtime, valuable customer relationship.

The third is being able to deal with personally identifiable customer data in a compliant way while being able to enhance it with other related sources of customer data.

- **Second-Party Data** – This is aggregated, anonymous "B-to-B-to-C" data. Examples of 2nd party data include when a consumer product manufacturer that sells through a retail channel wants to leverage customer sales data (albeit anonymous) or when partners exchange shared customer data such as between airlines and credit card companies. Leveraging 2nd party data enables an organization to get a more complete understanding of a customer in order to better engage with them. It's a similar story with franchisees, dealer networks, retailers, e-tailers, and partner networks. While valuable, the volume, granularity, and disparity of this data add orders of magnitude of complexity, meaning much of that value goes untapped.
- **Third-Party Data** – There are numerous bureaus and independent sources of third-party data that can help an organization build richer, more detailed consumer segments that can receive targeted messages, offers, and actions – if the identities can be resolved. For instance, a credit-card issuer could associate net worth or credit scores to adjust its offers and avoid offering balance transfers to consumers that pay off their balances each month.

Only by breaking the silos can businesses truly meet their customers' rising expectations for personalized engagement. Redpoint believes that it all starts with connected data. In the following pages, this paper examines the shortcomings of traditional approaches and outlines the Redpoint solution.

Ending the Division of Data

For centuries, businesses have long thrived on the division of labor, achieving extraordinary levels of efficiency. Craftsmen build products. Marketers market. Sales people sell. Financial experts provide the accounting. But division of labor has also meant division of data. The sales system creates a sales-centric collection of data – and the same is true across all functional domains of the enterprise. These separate islands of data mean there's no single source of truth about customers, markets, and operations.

And there's the rub.

Customers want you to know them – wherever they are, in whatever form (in-store, mobile app, online, call center, help desk, franchisee). They want you to maintain a continuous context with an ongoing, personal relationship. And they want you available at any time.

Unfortunately, these distinct silos of data prevent you from seeing the true, entire picture. The inability to analyze a combined and complete set of data means you can't see the full and accurate picture of customer preferences, business performance, and strategic opportunities and threats. Those isolated pockets of data are not visible, available, scalable, or actionable at the speed and detail that's needed to drive the business in new and profitable directions.

Imagine, for instance, that a consumer considers making a purchase from his desktop web browser but abandons the cart. Hours later, he changes his mind and completes the purchase in-store. The seller wants to make that connection with cross- selling offers. Or imagine a CPG manufacturer that has direct relationships with consumers. The IoT sensors can tell us about consumption, preferences, and lifestyles – facets that we could never previously understand. For instance, a so-called "smart- fridge" can sense when you are home, correlate it with the time of day, and access your activity data from your wearable fitness device to determine your calorie needs. It can tie in a diet app on your smartphone, match up the refrigerator contents – even examine your evening

The Data Value Chain

Data lives everywhere, and its value lies in its ability to provide context. However, to tap that value, companies must resolve three important challenges:

- **Data Access – It's an important milestone simply to identify and aggregate a complete set of first-, second-, and third-party data.**
- **Data Analytics – Resolve identities and add conditions, variables, and events to give context that goes far beyond simple profiling.**
- **Data Activation – Can the data be accessed and processed in a timeframe that the business requires to present offers, upsell opportunities, and next-best offers in real time and capitalize on the consumer's moment of need.**

The Power of Seeing all the Data

A financial services company relies on its transactional systems to track crucial details of its deposit customer to predict the likelihood of customer churn, improve conversions of HELOC offers.

A lawn-care franchisor has partnerships with thousands of independent franchisees that provide aggregated, anonymous second-party data about service issues and customer satisfaction.

A major credit-card issuer may want to target its offers to optimize response rates by blending in third-party data, such as purchase histories or credit scores, to hyper-personalize its "use points as cash" offers to customers carrying zero balances each month.

The Signs of Data Overload

- **More than 50 percent of businesses spend more time cleaning data than using it.**
- **Seventy percent of marketers have little or no abil- ity to unify customer data from online and offline sources, and 74 percent can't identify customers in real time.**
- **More than 60 percent of CMOs believe they are under-leveraging Big Data.**

schedule – to propose dinner recipes that are nutritionally appropriate and fit your schedule. And when the meal is complete, the smart fridge can add to the shopping list any items that need replenishing.

Another example is store beacons, which show particular promise. These wireless wayfinding sensors can be installed in a retail location and lead the smartphone user through a large home- improvement store. The beacon acts as an indoor positioning system to guide the consumer to the specific shelf where he can find the product he's seeking. If the shelf is empty, the app can check the backroom inventory, suggest next-best alternatives, point the buyer to another nearby location, or offer to ship the product to the home.

These consumer-centric shopping experiences drive a higher share-of-wallet by preventing the consumer from switching to a competing store. These techniques and principles (which can also leverage IoT device data) are valued by buyer and seller alike because there is relevance and context to help them accomplish their shopping tasks. Improving the customer experience directly increases the customer's lifetime value. When you engage consumers in more meaningful and relevant ways – as they appear and interact with you across numerous channels and touchpoints – your organization increases market share, customer revenue, brand affinity and loyalty, and, ultimately, profitability across the entire customer lifecycle. That's the power of a rich engagement – and it only comes with connected data.

A Look at the The Data Challenge

As technology becomes more sophisticated and omnipresent, companies are able to capture and store more types of data at lower costs than ever before:

- **Structured Data** – From anonymous users to known customers in traditional databases, structured data is the bedrock of the business.
- **Unstructured Data** – IDC says the amount of data will grow to 40 zettabytes by 2020 – a 50-fold increase in a 10-year period. What's more, Computerworld says 80 percent of that data will be unstructured – everything from Tweets to videos to Facebook posts. It's imperative that businesses find ways to make sense of that data, to make it an asset and not a liability.
- **Semi-Structured Data** – This can include data such as email addresses and keywords.
- **Behavioral Data and Clickstreams** – Consumers' online behaviors contain numerous meaningful insights.
- **IoT Device Data** – Billions of sensors are capturing consumer behaviors – can you make sense of it?
- **Big Data, Deep Data** – More businesses are looking at non-traditional data, such as time of day, the number of clicks used, voice recordings from call-center interactions transcribed into text.
- **Social Sentiment** – Heuristics can uncover consumer sentiment in postings across various social media channels.
- **Location-Based** – Companies are pulling data from first-, second-, and third-parties across the cloud and using location to capture share of wallet. For instance, based on a smartphone's location, the seller might make a real-time competitive offer or next-best offer. Some aggregators use UPC codes and locations to help buyers find the cheapest retail price within an x-mile radius.

The Segment of One

Traditionally, marketers have grouped their customers and prospects into a handful of segments based on demographics, psychographics, buying histories, and other meaningful variables. They often assign "personas" to these segments and deliver communications and offers that are targeted to these personas.

Today, however, consumers want to be treated as individuals, which is a broad-based trend with Millennials leading the way. More marketers are aiming to move beyond broad-based categories to create individualized, customized engagements – marketing to "the segment of one." That effort requires the ability to analyze all of the relevant data and respond in real- time to incidents and events as they unfold, when the buyer is in the moment.

- **Channel Proliferation** – More marketing and communication channels mean the volume of data is growing exponentially.

Coming Up Short

While they're intensifying, business-data challenges aren't new. Companies have tried several strategies in their attempt to harness the power of data in ways that are feasible and effective.

- **Data Warehouses** – Data warehouses and data marts have arisen in recent years in an attempt to create the long-sought unified views of customers, products, markets, and channels across this fragmented data landscape. They can play an important role in longer-term, offline analytics. However, these technologies lack the detailed information and real-time access required to personalize interactions.
- **Data Management Platforms** – Data management platforms (DMPs) can connect data, but they don't retain the data on an ongoing basis. It's often gone within 90 days. Most of these systems are focused on anonymous-cookie tracking and real-time bid management, and they often lack robust identity- resolution capabilities to take a customer from unknown to known and retain that view over time.
- **Marketing Clouds** – Marketing clouds – such as Oracle, Salesforce, and Adobe – are virtual "walled gardens" that work well in digital channels, but aren't well suited to traditional channels like in-store, POS, direct mail, or call centers. These solutions aren't designed for best-of-breed deployments and are often unable to work with a broader ecosystem, for example they are unable to ingest analytic models from third- party platforms. These clouds also have a data processing problem – they assume the customer data is uploaded in a clean, usable form – which is rarely the case. They also often struggle with high-volume and real-time Big Data applications, which is increasingly a requirement for managing customer data to drive personalized engagement.
- **ETL Tools** – General-purpose data-management tools and ETL software products cannot deliver both the simplicity and performance required by fast-moving businesses today.

Massive data volumes mean these tools are overmatched, lacking the combination of scalability, speed, advanced matching algorithms, and cost-feasibility that businesses expect.

The Redpoint Customer Data Platform

The best data analyses and game-changing insights will never happen without the right data in the right place at the right time. That's why data preparation is a non-negotiable must for any successful customer-engagement initiative. The fact is, you can't simply load data from multiple sources and expect it to make sense. Without the right quality, you won't get the right results. Or, in more positive terms: The more precise your data is, the better your analytical models that can drive more relevant customer interactions.

As data sources, types, and volumes grow exponentially, companies need simple, business-friendly ways to add new data – in fact, all of their data – to drive their analytic models. Redpoint's enterprise customer engagement platform taps into any and all data sources – structured, semi-structured, or unstructured – and transitions anonymous to known customer identities using highly advanced probabilistic and heuristic algorithms. You can leverage a single software platform to aggregate, clean, match, and transform your data with a simple drag-and-drop user interface – no coding required. You're no longer relying on someone else to get you the data, and you're not confined to using outdated extracts. Redpoint gives you live data with no latency, bringing together e-commerce, order management, POS, channel info, and much more.

Redpoint also offers exceptional ease of use to empower your business users to self-serve their data needs. You can also feed your analytics tools with any and all available sources of data, because with Redpoint your data preparation process happens automatically and scales economically – without any coding at all. Now you can work with first-party, second-party, third-party, structured, unstructured, active, and dark data. We process it at the speed your business and customers demand, which means that you will deliver accurate analytical insights in the timeframe when it's most useful to the business. Redpoint is the way to connect all your customer data to better engage with customers.

Redpoint Advantages

- **Top-Ranked Solution** – Higher-quality data starts with advanced data matching and identity resolution capabilities. Redpoint has been ranked No. 1 by Gartner for data quality. The key is Redpoint's high-precision identity resolution across all data sources and identity proxies – whether resolving individuals, households, or IoT devices.
- **Identity Resolution with Persistent Keys** – The cornerstone of any data-quality initiative is identity resolution, starting with a golden record from core data entities that can be consumed by other areas in the organization. Combined with identifying keys that persist over time, this provides the basis to integrate other data as it becomes available, while standardizing, normalizing, validating, and enhancing it as part of an automated process.
- **A Single, Unified View** – Redpoint lets you see a comprehensive view of the customer that you need to strengthen conversion rates, increase customer lifetime value, and lower the cost of interaction. Using higher-quality data to drive operations and analysis also lowers error rates and

drives more impactful outcomes across the enterprise. With a single unified view, you can deliver highly relevant messages and actions at every moment of engagement.

- **Unprecedented Speed** – Redpoint improves your analytic models by incorporating more data and reducing latency, processing data at high volumes and at high speed. In fact, Redpoint's data technology is up to 19x faster than competing technologies. Now you can flip the 80/20 rule, reducing your data prep time so you can spend more time on value-add activities. For instance, at Xanterra, Redpoint's platform reduced data-prep time by more than 80 percent while delivering precise data quality – enabling the firm to spend more time on higher-value activities like tuning and optimizing analytic models, developing dynamic customer journeys, and delivering the best experience for customers.
- **Work Where the Data Resides** – in Real-Time – Redpoint can work with your data, right where it resides. You can automatically execute data-quality routines in a scripted production flow inside traditional database or Big Data/ Hadoop environments. Your data prep happens – without moving the data from its environment. That reduces latency between aggregating your data and analyzing in a predictive model to drive customer engagement. That means you get advanced analytics that fully reflect your business's opportunities and threats.
- **Data Orchestration** – It's not enough to unify data (physically or virtually). And it's not enough to improve your processing speed. You must also insert that data inline – in the moment of need, across the enterprise. Enterprises need the ability to access e-commerce data from the call center. And call-center data from the help desk. And be able to access POS data from e-commerce to refund a purchase price to a buyer's credit card.
- **Simplicity and Usability** – Access any data type from any source without any coding skills. You can add new sources with drag-and-drop simplicity. That reduces your costs and cuts the time required to obtain critical insights. With Redpoint, your business units are closer to the data that drives their outcomes.

About Redpoint Global

With Redpoint's software platform, innovative companies are transforming their customer experiences across the enterprise and driving higher revenue. Redpoint's solutions provide a remarkably unified, single point of control where all customer data is connected and every customer touchpoint intelligently orchestrated. Delivering more engaging customer experiences, highly personalized moments, relevant next-best actions, and tangible ROI—this is how leading marketers lead markets. To learn more, visit **redpointglobal.com.**

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