Paper 127-2011

Taking Your Analytics Up A Notch By Integrating Clickstream Data

Bill Franks & Rebecca Bucnis, Teradata, Atlanta, GA

ABSTRACT

As technology progresses, analytics that were theoretically exciting, but not pragmatically feasible, become achievable. One such area is a fuller integration of detailed, customer-level behavioral data sourced from a Web site into an enterprise analytics environment. Most companies stop their Web integration with the inclusion of online sales transactions. Web vendors provide operational reporting on click-thru rates, traffic sources, and Web-centric metrics based only on Web data. However, the detailed Web behavior data is not usually leveraged outside of Web reporting.

Leading companies have shown how that detail can provide previously untapped corporate value. This presentation will outline what those leaders are doing, why they are doing it, and why your organization should consider such actions today. The examples are quite compelling and promise to be eye opening to those who have not yet given much thought to integrating their detailed clickstream data.

INTRODUCTION

Once upon a time, not so long ago, the 360° view of any business's customer was contained within the four walls of the business. It was often difficult to assimilate and make sense of, but over time, true insight and business improvement was achievable through tapping a business's own data. In the last few years, leaps of technology development and higher levels of consumer interactivity have changed the playing field. What does that mean? The full view of sales, customers, and products once sat within environments that were under full corporate control. Increasingly, critical information is drifting from areas that the corporation fully controls and into the public domain where the corporation has less control. These information sources include web behavior, interactions through mobile applications or kiosks, social media activity, and more.



It will become clear that the core theme of this paper is not about focusing exclusively on traditional web analytics or reporting. Instead of aggregated web metrics from a distinct data silo, what this paper will focus on is the integration of web behavior data with all the other relevant information you have about a customer. Utilizing such information in a scalable analytics environment, you can move beyond purchasing insights about your customers and into individual intentions, purchase decision processes, and preferences. Tapping into the rich insight provided by these new data sources, exponential strides forward can occur within an organization.

How do you capture, assess and utilize this rich information to drive insight? This paper will discuss some key concepts and illustrate them with examples. It will hone in on the use of corporate web data while preparing you for additional insights into social media in a separate series. First, an outline of what types of new data you need to start gathering and why such data types are important will be provided. Next, you will see examples of the exact data points you should focus on, along with examples of what that data can tell you. Finally, you will see specific examples of how your analytics can be transformed through the integration of the new data. By the time you finish reading, the goal is to have you excited and motivated to go and drive these important changes in your business.

WHAT IS A 360° VIEW OF YOUR CUSTOMERS?

Companies have talked about a 360° view of their customers for years. At any point in time, one organization or the other claims that it has achieved a "true" 360° view. What does that mean? In reality, it is impossible to have a true 360° view as that implies you truly know everything there is to know about your customers. When a 360° view is discussed, what is really meant is that the organization has as full a view of their customers as possible, considering the technology and data available at that point in time. However, the finish line is always moving and just when you think you have finally arrived, the 'finish line' extends again.



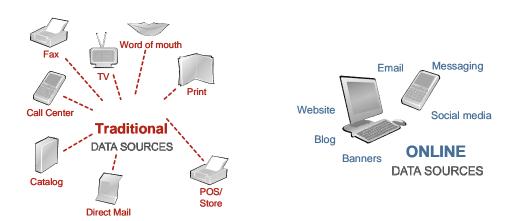
A few decades ago, companies were at the top of their game if they had not only the names and addresses of their customers, but if they were able to append demographic information to those names through the then-new third party data enhancement services. As time passed, it became necessary to overlay not just demographics, but information gathered from surveys, interest profiles, subscriptions, and other outside sources. Eventually, cutting edge companies started to have basic Recency, Frequency, and Monetary Value (RFM) metrics attached to customers.

These RFM summaries might be tallied for the past year and lifetime. In the past decade, virtually all businesses started to collect and analyze the detailed transaction histories of their customers. This led to an explosion of analytical power and a much deeper understanding of customer behavior.

Many organizations are still frozen at the transactional history stage. Indeed, it should be noted that capturing detailed line item transactions for individual consumers was, and continues to be, a significant milestone. Today, while this is still important, many companies incorrectly assume that this is the closest view possible to a 360°view of their customers. However, technology, consumer interactivity, and underlying data architectures are rapidly evolving. Today, organizations need to be collecting newly emerging detailed data about their customers from a variety of extended and newly emerging touch points. These include interactions provided by web browsers, mobile applications, kiosks, social media, and more. Just as transactional data enabled a revolution in the power and depth of analysis, so too do these new data sources enable taking analytics to a new level. Your organization must integrate these data sources and extract the value they provide to stay competitive. With today's data storage and processing capabilities, it is absolutely possible to achieve success and many forward thinking companies have already proven it.

WHAT ARE YOU MISSING?

Have you ever stopped to think about what happens when you only capture the transactions generated by your web site? On average, approximately 95 percent of browsing sessions do not result in a basket being created while 5 percent do. Of that 5 percent, only about half, or 2.5 percent, actually begin the check out process. And, of that 2.5 percent only two-thirds, or 1.7 percent, actually complete a purchase. What this means is that you are missing information about more than 98 percent of your web sessions. But more importantly, you are missing an even higher percentage of available data. For every purchase transaction, there might be dozens or hundreds of specific actions that were taken on the way to get to that sale. That information needs to be collected and analyzed alongside the final transactional data.



It is important to note that this is not just the same old web analytics story from years past. Traditional web analytics focus on aggregated behavior, summarized in a siloed environment. The concept in this paper is moving beyond reporting of summary statistics, even if they can be viewed in some detail, to actually combining customer level web behavior data with other cross-channel customer data. This is moving far beyond click thru reports and page view summaries. Just as RFM is only a small piece of what transaction data yields, so too are traditional web analytics only a portion of what web data can yield. This is a game changing, amazing new frontier that can revolutionize your customer insights and the impacts those insights have on your business

IMAGINE THE POSSIBILITIES

Imagine knowing everything your customers do as they go through the process of doing business with your organization. Not just what they buy, but what they are thinking about buying along with what key decision criteria they have. Such knowledge enables a new level of interaction with your customer. It allows you to meet their needs more quickly and keep them satisfied.

Imagine you are a retailer.

• Imagine walking through the aisles with your customers and recording every place they go, every item they look at, every item they pick up, every item they put in the cart and then take back out. Imagine knowing whether

they read nutritional information, if they look at laundry instructions, if they read the promotional brochure on the shelf, or if they look at other information made available to them in the store.

Imagine you are a bank.

• Imagine being able to identify every credit card option customers considered. Imagine being able to understand if it was a reward program, interest rates, or annual fees that drove their choice. Imagine knowing what they say about each product after they own it.







Imagine you are an airline.

Imagine being able to identify every flight your customers viewed before choosing their final itinerary. Imagine
knowing if they cared more about price or convenience. Imagine knowing all the destinations they consider and
when they first consider them.

Imagine you are a telecom company.

• Imagine being able to identify every phone model, rate plan, data plan, and accessory that your customers considered before making a final decision. Imagine knowing that the way they came back to your site was by typing into a search engine "renew contract" or "contract cancellation".

It certainly sounds exciting to have the information outlined above. You can have it and you can have it right now by making a commitment to collect it and make it available to your analytics.

A FUNDAMENTALLY NEW SOURCE OF INFORMATION

The beauty of exploring your customers' detailed web behavior data is that it moves you beyond just knowing what they buy. You can now gain insights into how they made their decisions. Instead of seeing just the result, you have visibility into the entire buying process. These data sources aren't a simple extension of existing data sources. Many organizations were excited over the integration of "new" web transactions with their traditional transactions. But, at base, it was another transaction record with a new "transaction type" or "transaction location" flag. In this case, there is no existing analog to most of the web data you can collect. It is a fundamentally new source of information.

One of the most exciting aspects of web data is that it provides you factual information on customer preferences, future intentions, and motivations that are virtually impossible to get from other sources outside of a direct conversation or survey. Why do customers choose one offering over another? Perhaps you think you know. However, you will likely find that there are many customers making choices in ways you had not anticipated. Once you know your customers' intentions, preferences, and motivations, it provides completely new ways of communicating with them, driving further business, and increasing their loyalty.



The glorious part of this story happens when you marry the new data to all that you have learned in the prior '360° view'. You already have strong buying information and how much and how often they buy. Now you can extend that with all the rich new web behavior data available.

WHAT DATA SHOULD BE COLLECTED?

Any action that a customer takes while interacting with your organization should be captured if you are able to capture it. That means detailed event history from any customer touch point. Common touch points today include web sites, kiosks, mobile apps, and social media.

There is a wide range of events that can be captured, including the examples below:

- Purchases
- Product views
- Shopping basket additions
- Requesting help
- Forwarding a link
- Posting a comment

- · Watching a video
- Accessing a download
- Reading/writing a review
- Registering for a webinar
- Executing a search
- Etc, etc, etc

This paper will focus primarily on web data. This is for two primary reasons. First, almost every company has a corporate website and can start collecting such data today. Second, it is the area with the most developed technology to assist with data capture. However, while the examples that follow will be website centric, keep in mind that the concepts apply across the board to all touch points as well as to data created outside of your corporate website, such as your social media sites.

WHAT ABOUT PRIVACY?

Privacy is a big issue today and may become bigger tomorrow. Serious consideration needs to be given to what data you capture and how it is used. You need to respect not just formal legal restrictions, but also what your customers will view as "appropriate". It is beyond the scope of this document to cover privacy in any detail, as it is an issue worthy of a deep discussion. However, it needs a mention as something that needs addressing.



Do you want to be very conservative with your actions? Even if you do not want to interact with customers individually or tie the data back to other identifiable customer data, these new data sources are still valuable. An arbitrary identification number that is not personally identifiable can be matched to each unique customer based on a logon, cookie, or other identifiable piece of information. Then, analysis is done to look for patterns across customers. These patterns are powerful and can be found without ever worrying specifically which given individual did what.

The individuals in this example are only important as an input to the pattern analysis. Nobody needs to find out who each individual actually is in order to derive value. With today's database technologies, it is possible to enable analysts to do analysis without having any ability to identify the individuals involved. This can remove many privacy concerns. The concept is similar to how many food companies safeguard their secret recipes. Only a few individuals know each individual subset of ingredients. They each add their pieces independently. In the end, the recipe is right, but nobody actually knows the whole recipe. The secret recipe is safe, just as the customer identities are safe.

THE DATA IN DETAIL

UNDERSTAND DETAILED SHOPPING BEHAVIORS

A good starting point is identifying how your customers came to your site. What search engine did they use? What specific search term was entered? Did they use a bookmark they created previously? You can take this information and look for patterns in terms of which search terms, search engines, and referring sites are associated with higher



sales rates. Note that you will be able to look into higher sales rates not just within a session, but also for the same customer over time, both on the web site along with the cross channel view of their purchase behavior over time. That is where the value resides.

Once the customers are on your site, start to examine all the products they explore. Identify if they simply looked at the main product page and left, or if

they drilled down further. Did they view extra photos? Did they read reviews? Did they look at detailed product specifications? Did they look at shipping information? What about any other information that is available on your site? You can also identify which products were chosen for a "Compare" view. Last, you can easily identify which products were added to a wish list or basket, as well as if they were later removed.

One very interesting capability is to identify product bundles that are of interest to a customer before they make their purchase. Move beyond trying to up-sell a customer after a purchase with a follow up offer. Instead, examine what they are browsing and make them an offer to buy a complete bundle in the first place. For example, consider a customer who views computers, back up disks, printers, and monitors. It is obvious the customer is considering a complete PC system upgrade. Offer a package right away that contains the specific items the customer wants. Do not wait until after they purchase the computer and then offer generic bundles of accessories. A customized bundle offer before customers buy is more powerful than a generic one after they have already purchased.



UNDERSTAND PURCHASE PATH & PREFERENCE DATA

Using web data, you can identify the ways your customers arrive at their buying decision by watching how they navigate your site and gleaning their preferences from that. Assume for a moment that you are an airline. You can tell a number of things about my preferences based on the ticket I book. For example, how far in advance was the ticket booked? What fare class was booked? Was the trip over a weekend or not? This is all useful, but you can get even more from your web data.

Do your customers value convenience and typically start searches with specific times and direct flights only? Then, they will only deviate from the most convenient direct flight if there is a huge price difference for a minimal change in convenience? Perhaps they can save \$700.00 by flying into New York's JFK airport instead of LaGuardia. They can land at JFK within 30 minutes of the LaGuardia flight and the extra cab fare is only about \$50.00. In that case, customers might decide it is worth a net \$650.00 in savings to deal with the extra hassle of JFK. But, if the difference is only \$200.00 and the time of arrival is two hours later, the customers stick with the most convenient options.



Do your customers value price first and foremost and are willing to consider many flight options to get the best price? Then, will they only deviate from the cheapest option if there is a moderate price difference for a huge gain in convenience? For example, your customers can leave at 10:00 a.m. for \$220.00 versus \$200.00 at 6:00 a.m. The



four hours of extra sleep are worth it to the customers and they pay the \$20.00 premium for the later flight.

Based on search patterns, you can also tell how tied to deals or destinations a given customer is. Do they research all of the special deals available and then choose one of those for their trip? Or do they only look at a certain destination and pay what is required to get there? For example, a college student may be open to any number of spring break locations and will take the one with the

best deal. A customer who is going to visit family will only be interested in going to where the family is. Simply knowing that customers regularly browse weekend deals can be a good indicator. Perhaps they are open to visiting family any time. Whenever they see a deal to the right city, they book it. Once you identify that pattern, you can anticipate the customers' response better. Again, this is an example where a combination of historical insight and purchase history is invaluable when married with ongoing research, considerations and purchases.

Of course, it will take time and effort to change your analytical processes to account for such patterns. But, if you can identify the aspects of your site that really appeal to your best customers, you can target them much more effectively.

UNDERSTAND DETAILED RESEARCH BEHAVIORS

Understanding how your customers utilize the research content on your site can lead to tremendous insights into how to interact with each individual customer as well as how different aspects of your site do or do not add value to driving more sales. As you examine which options customers explore on their way to a purchase, you can infer what is important to them.

For example, if customers routinely look at the standard, widescreen, extended, and HD versions of a video before



making a final decision, that tells you they are open to the options even if they often end up buying a single format. Similarly, you can identify how different videos compete for purchase with individual customers and which formats seem to win out at an individual level, not in aggregate. Once you know your customers' preferences, you can alter what you show them when they visit your site in order to make it easier for them to find their favorite options quickly. Why make customers sort through all the formats they do not purchase if you can take them right to their preferred choice?

Another way to use research data is to identify which of the pieces of information offered on your site are valued by your customer base overall and your best customers specifically. How often do customers look at a previews, additional photos, or technical specs before making a purchase? Note that since you are tracking across sessions and combining with other customer data, you will know if people researched one day and then bought later. Often the final purchase event will be a highly targeted web session that simply executes the purchase. You need the historical browsing history to put the whole picture together.

If you see many people dropping a product after looking at the detailed specs, explore what those customers often did buy. With detailed cross channel sales details, you can compare findings from the site search to actual sales in other channels. You may uncover a product or quality issue that makes consumers steer away from the product, or perhaps the product is missing some key attributes. Sometimes it may be as simple as your description was not clear and with an updated description, sales will increase.

The reading of reviews is a tremendous indicator of what is important to people. Which customers value reviews? Which do not? Which products are routinely having customers leave after reading the reviews? Reviews have the power to make or break your sale. If you see many customers who usually buy after reading reviews deciding not to purchase a specific product after reading the review, you should look into it. Perhaps some negative reviews are

posted. If so, you can identify if they are valid, what points they raise, and how you will address those points.

The Process of the Secretary School (Bloods - Blood)

The Secretary School (Bloods - Bloods - Blood

In the end, identifying which site features are important to each customer can help you better tailor your site to the individual. For customers who always drill to the detailed specs, perhaps those specs come up on the main page. For those who always want to see photos, perhaps photos are featured full size instead of as thumbnails. The point is to make research easier for your customers so they will come to you instead of the competition.

UNDERSTAND DETAILED FEEDBACK BEHAVIOR

Perhaps the best information your customer can provide to you is detailed feedback on your products and services. Simply the fact that a customer is willing to take the time to do so indicates that they are engaged with your business and brand. By using text mining to understand the tone, intent, and topic of a customer's feedback, you begin to get a better picture of what is important to them.

Do certain customers write reviews of what they buy on a regular basis? If they do, and you can identify that those reviews are often positive and are read by others then perhaps you need to give that person some special incentives to keep the goodness coming. Similarly, by parsing the questions and comments submitted via your live help chats

with customers, you can get a feel not just for what customers in general are asking about, but what each specific customer is asking about. If you notice that certain features are always important for a certain customers, you can point the customers in the direction of other items with similar attributes.

Is your customer a fan of yours on Facebook? Do they follow you on Twitter? Again, by looking at the comments and questions they pose through these interfaces, you can learn more about their likes and dislikes. Additionally, when you identify very active customers who are always saying things about your company on social media sites, you may want to cultivate them as an influential brand ambassador. Give them the extra attention they deserve given the potential influence they have over your brand. Note that your customers'

influence will not always be strongly correlated with their value. A mid-sized customer who usually warrants the standard treatment may be very vocal. You had better upgrade them beyond what their dollar value implies. We will explore this topic in more detail in a separate paper series focused on social media.

THE DATA IN ACTION

YOU NEED A COMPLETE PICTURE

What you know about your customer is never complete. You always have to make assumptions based on what information you have. If you have a partial view, you can often extrapolate the full view accurately enough to get the job done. But, it is also possible that the information you are missing paints a totally different picture than you'd expect. In the cases where the missing information differs from your assumptions, you can make a sub-optimal, if not totally wrong, decision. Therefore, you should strive to collect and analyze as much data as you can. We've discussed a number of different types of web behavior data and some broad uses of them. Now, let's move on to some specific examples of how you can apply your web data to enhance existing analytics or enable new analytics.

NEXT BEST OFFER

A very common analysis is to predict what the Next Best Offer is for each customer. Of all the available options, which single offer should you next suggest to that customer? Having web behavior data can totally change your decisions as to what the next best offer is and make your decisions much more robust.

Let's assume you work at a bank. We know the following information about Mr. Smith:

- He has four accounts: checking, savings, credit card, and a car loan
- He makes five deposits and 25 withdrawals per month
- He never visits a branch in person
- He has a total of \$50,000.00 in assets deposited

He owes a total of \$15,000,00 between his credit card and car loan

What is the best offer for Mr. Smith in your email later today? It would be reasonable to argue for any number of things such a lower credit card interest rate or an offer of a CD for his sizable cash holdings. One thing that would not come up high on most lists is a mortgage because you have nothing that says it is remotely relevant. However, you look at Mr. Smith's web behavior and realize a couple of key facts:



- He browsed mortgage rates five times in last month
- He viewed information about homeowners insurance
- He viewed information about flood insurance
- He explored home loan options (i.e., fixed vs. variable, 15- vs. 30-year) twice in the past month

Isn't it pretty easy to choose what to discuss next with Mr. Smith now?

Another example of this can be shown via a catalog retail company. During economic recession, it is difficult for any retailer to determine if their customer base is still engaged. The web changes this perspective and even provides direct clues as to what is of interest. For a catalog retailer with a few stores, this can even more insightful. One cataloger went so far as to view the following for each customer:

 Last products browsed, last products reviewed, compared with historical purchases and married with marketing campaign activities

The summary of these analytic efforts led to change in total promotional efforts that provided the following results:

 A decrease in total mailings, a reduction in total catalog promotions pages, and a "materially significant" increase in total resulting revenues.

ATTRITION MODELING

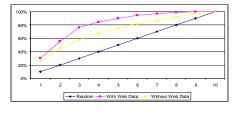
Let's now assume you work in the telecommunications industry. In the Telecom industry, companies have invested massive amounts of time and effort to create, enhance, and perfect 'churn' models. These models flag those customers most at risk of cancelling their accounts so that action can be taken proactively to prevent them from doing so.

All of this has been, and remains, critical to understanding patterns of customer usage and profitability. Imagine how this has been invigorated today with the use of web data put into the right context. Mrs. Smith, as a customer of telecom Provider 101, goes to Google and types "How do I cancel my Provider 101 contract?" She then follows a link back to your cancellation policies page. Imagine how much stronger, more time sensitive, and usable this customer data is for the churn model. It is hard to think of an indicator of cancellation that is stronger then knowing that Mrs. Smith researched cancelling aside from her actually taking the final step of making the request.

RESPONSE MODELING

When scoring customers on a binary choice (typically yes/no for some action) logistic regression is often used.

Common examples include response modeling, propensity modeling, and attrition modeling. All customers are scored, ranked, and then the appropriate selections are made based on those ranks. In theory, every customer has a unique score. In practice, given that only a small number of variables define the model, many customers end up with identical or nearly identical scores. This is particularly true among customers who are not very frequent or high spending, where many customers can end up in big groups with the very similar low scores.



Web data can help greatly increase differentiation among customers. This is especially true among the low value customers where some may have a large uplift in score based on the web data. Let's look at an example where four customers are a scored by a response model with a handful of variables. Each customer in the example has the exact same score due to having the same value for each of the model's variables. The four customers' profiles are as follows:

- Last purchase was within 90 days
- Six purchases in the past year
- Spent \$200.00 \$300.00 in total
- Homeowner with estimated household income of \$100K \$150K
- Member of the loyalty program

Has purchased the featured product category in the past year









In this case, all customers get the exact same score and look identical in terms of likelihood to respond. We will assume they all score a 0.62. Now, using web data, let's see how drastically the view changes. Below, look how the web data provided powerful new information:

- Customer #1 has never browsed your site so their score drops to 0.54.
- Customer #2 viewed the category featured in your offer within the past month so their score rises to 0.67.
- Customer #3 viewed the specific product featured in your offer within the past month so their score rises to 0.78.
- Customer #4 browsed the specific product featured three times last week, added it to a basket once, abandoned the basket, then viewed the product again later. Their score rises to 0.86.





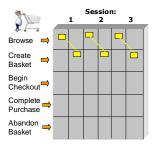




Clearly, the web behavior allows us to identify those with a current interest, if not intention, to purchase. You are able to score the customers better and end up with solid differentiation where you originally had little. Now, repeat the example of these four customers across millions of customers across multiple channels and you can drive dramatic changes! To quote a director of marketing from a multi channel American specialty retailer "It's like printing money". Effectively, your lift curve gets better because with the web data we are able to be more confident in our scores and filter low probability customers from high probability customers better. The good news is that it is very easy to build a model with and without the web data to prove exactly how much the lift curve improves for any given situation.

CUSTOMER SEGMENTATION

Web data will enable completely new analytics when viewed over time. One of those is to segment customers based solely upon their typical browsing patterns. Such segmentation will provide a completely different view of your customers than traditional demographic or sales based segmentation schemas. In addition, such segmentation can yield unique insights and actions.



Consider a segment called "Dreamers" that has been derived purely from browsing behavior. Dreamers repeatedly put an item in their basket, but then abandon it. This may be especially true on a high value item like a TV or computer. You can clearly identify the segment of people that does this repeatedly. So, what do you do? One option is to look at what the customer is abandoning. Perhaps they are looking at a highend TV that is quite expensive. Sending an email pointing out some less expensive options that have many of the same features may be a way to get them to pull the trigger.

Another option is operational in nature. You might adjust your abandoned basket statistics. Abandoned baskets are often viewed as a "failure" by organizations. However, if you can clearly identify that ten abandons were due to one customer you know

repeatedly abandons a lot of products on a regular basis, you might reduce the abandoned basket count and just count all his abandons for that product as a single instance. This will yield a cleaner view of abandonment.

ASSESSING ADVERTISING RESULTS

Better assessing paid search and online advertising results is perhaps one of the highest impact analyses enabled through customer level web behavior data. Traditional web analytics provide high-level summaries such as total clicks, number of searches, cost per click or impression, keywords leading to the most clicks, and page position statistics. However, these metrics are at an aggregate level and are rolled up only from the individual session level and the context is limited to the web channel. This means that all statistics are based only on what happened during the single session generated from the search or ad click.

By incorporating the customer level data and extending the view to other channel results as well, it is possible to assess results at a much deeper level. Were the site visits each ad or search term generated associated with the most valuable or least valuable customers? How many sales did the initial session lead to in the one or two weeks that followed the initial click? Are certain referring sites drawing visitors that stay longer and return for more visits

than those referred from other sites? By expanding further to a full cross channel analysis, the entire advertising result could show a drastically different picture.



Try this example from a European financial institution. Credit card applications are everywhere. They are in the mail, they are in magazines, and they are now available at multiple locations on the web, from your favorite news suppliers to paid search listings on the side of your search results.

One banking group understood that the 'eyeballs and clicks' were truly only a portion of the picture. What happened after the initial click was the telling information about the value of the advertising placement. Extended analytics showed further results including not just clicks, but application completion, validation, card issuance, activation and actual credit spending! This view of advertising beyond the click provides a more complete view of advertising success.

Through the detailed, customer level web data, you are able to get down to understanding which ads, keywords, or referring sites generate the "best" clicks based on a much larger picture than simply aggregated results from initial web sessions. With the additional insight provided by the extended cross-channel view, you can see a picture that has previously been



unavailable. Companies who understand the deeper context will have an opportunity to take advantage of new strategies that companies using traditional levels of analysis will not be able to identify. That is a distinct competitive advantage.

The point of all of these examples is that your customers are telling you a lot about how your business is working if you are willing to listen

CONCLUSION

TRANSFORM YOUR ANALYTICS TODAY!

The integration of detailed, customer level web behavior data has the ability to transform what organizations understand about their customers. The data will enable entirely different views of customers, not simply an extension of traditional views. There is no other data source available today that allows such deep insight into customer intent, preference, and buying processes.

Most importantly, the web is not the only new data source available. Other sources of customer interaction data can also be tracked and analyzed, including those such as social media activity, mobile application activity, kiosk activity, and more. Married with traditional detailed transactional data, organizations further enhance their view of their



customers. The results achieved will be similar to gains made when companies were finally able to move from aggregated transaction history that supported basic Recency, Frequency, and Monetary Value (RFM) analysis to actually having the details of every individual transaction for each customer.

Similar to detailed transaction data compared to RFM, organizations are moving from simply knowing summary statistics of web behavior to actually having all of the details beneath those summary statistics. It is a very exciting time that will lead to dramatic changes in how companies do business. Anyone reading this paper today needs to seriously assess what his or her organization is doing to participate in this trend. As of early 2011, it is still something early adopters are doing. However, the pace is picking up. As the successes of the early adopters become public, more companies are jumping in

and getting started. Within the next 12 - 18 months, the opportunity to be a leader in this space will pass. Then, your organization will be relegated to chasing your competition and trying to catch up. Do not let that happen!

In the end, these new data sources will not be the last new sources. Things will evolve and other, newer sources of customer insight will become available. When that happens, go after those too. But, you have to start by ensuring you are doing all you can do today. While you may never reach a true 360°view of your customers, you can strive to be as close as possible at all times. Why not join the organizations that have already embraced the data outlined in this paper and reap the benefits?

CONTACT INFORMATION

Your comments and questions are valued and encouraged. Contact the author at:

Names: Bill Franks & Rebecca Bucnis

Enterprise: Teradata

E-mail: Bill.Franks@Teradata.com, Rebecca.Bucnis@teradata.com

Web: www.teradata.com

SAS and all other SAS Institute Inc. product or service names are registered trademarks or trademarks of SAS Institute Inc. in the USA and other countries. ® indicates USA registration.

Other brand and product names are trademarks of their respective companies.