Observations on Strengthening Digital Capability

Despite high hopes for applying rigorous analytics to the rapidly growing volumes of digital marketing data, progress has been slow and constrained for many organizations. The central roadblocks, according to most marketers, are technical: the lack of information integration—the absence of a single, timely view of performance across channels—or sophisticated tools to support multichannel analytics.

This chapter begins with an exploration of the roadblocks to analytical progress, focusing specifically on the areas where organizations are most likely to find immediate performance gains.

- We seem to be stuck in a Catch-22 situation where we can't run multichannel analytics because the data is disconnected, but then no one wants to pay for getting the data integrated because we haven't proven the value of multichannel analytics.
- It feels like we are nearly starting from scratch every time we launch a campaign as to what we think works and what doesn't
- Our lead scoring methodology is good, but it hasn't been modified or updated since we rolled it out.
- We know our current view of channel effectiveness is skewed, but we're not sure how to develop a more detailed understanding without introducing lots of arbitrary judgments and assumptions.

Information Integration Woes

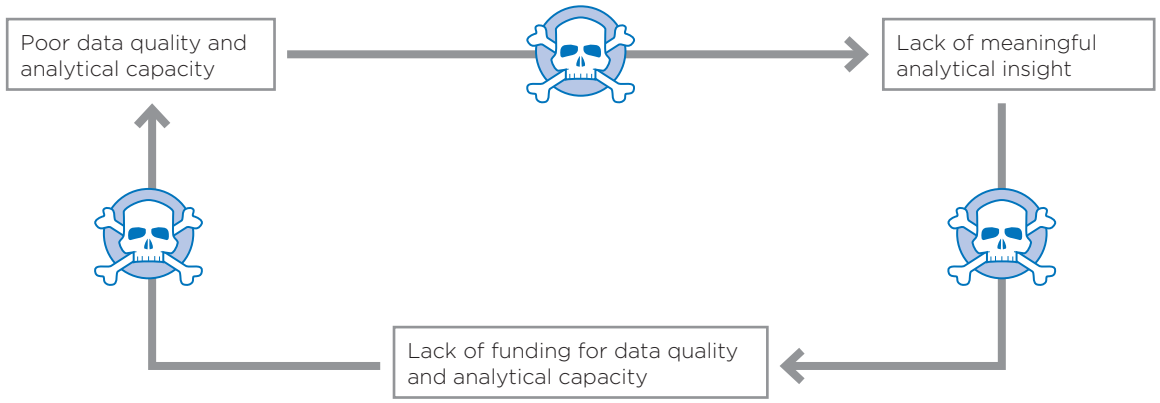
According to most marketers, the central roadblocks to applying rigorous analytics to digital marketing are technical in nature.

Despite high hopes for applying rigorous analytics to the rapidly growing volumes of digital marketing data, progress has been slow and constrained for many organizations. The central roadblocks, according to most marketers, are technical: the lack of information integration—the absence of a single, timely view of performance across channels—or sophisticated tools to support multichannel analytics.

The analytical environment for most B2B marketers continues to be very disconnected, featuring a wide range of tools and data sources spanning online, social, and mobile platforms. Attempts to integrate data often require laborious manual effort using spreadsheets. Some organizations have undergone large-scale, multiyear data management initiatives to improve integration, only to find that the diversity, incompleteness, and rate of change in marketing data sources greatly diminished many of the intended benefits of integration.

The reality for most B2B marketers is a negatively reinforcing cycle (Figure 24). A low-quality analytics environment yields low-quality insights; as a result, analytical efforts have little impact on decision support, which precludes further investment in improving the analytics environment.

Figure 24: The Negatively Reinforcing Cycle Preventing Analytical Growth



Focusing on Big Judgment

"If you have $100 to spend on analytics, spend $10 on the tools and $90 hiring the smartest analytical talent you can find."

Avinash Kaushik
Analytics Guru
Google

The largest roadblock inhibiting progress for many marketers may be the belief that having fully integrated information is a prerequisite (or worse, the solution) for resolving key challenges in marketing analytics. While improving integration among important data sources can help improve the efficiency of certain analyses, it is far from being a complete solution. Some experts say the goal of building a single, integrated view of all relevant marketing data is actually unrealistic, given the diversity of platforms, tools, and data types along with the perennial issues related to primary keys, cookie quality, switching behaviors, and data accuracy. These challenges are unlikely to be sufficiently resolved for any organization anytime soon.

Growing evidence suggests that talent shortfalls in areas such as modeling, experiment design, results interpretation and framing are the real constraints many organizations are battling, but these shortfalls are being outshined by information integration concerns at many organizations. CEB recently conducted a study into the drivers of effectiveness in extracting insight from the organizational data to support decision making. The results confirmed that a minimum level of information accessibility and quality were essential for high-performing organizations. However, analytical capabilities of employees were also a critical factor for the generation of insight, something which is often under-emphasized in the buzz regarding "big data." One of the most striking findings is that if staff were not effective at critical thinking and applying judgment in data analysis, greater access to information actually caused more harm than good.

Some of the excitement related to analytics should be refocused from integrating information to developing the analytical capability itself. Skilled analysts can create a very clear and evidence-based decision support framework for understanding and improving multichannel digital marketing effectiveness over time, and perfect data is not required to do so. One proponent of this mind-set, Avinash Kaushik, analytics guru for Google, offers the following recommendation: if you have $100 to spend on analytics, spend $10 on the tools and $90 hiring the smartest analytical talent you can find. Many of the gains in this space will come from above-average analytical and creative skills in analysts, rather than above-average tools or perfect data.

Talent requirements for high-impact analytics extend far beyond familiarity with tools and techniques. The emerging expectations for analytical talent include a breadth and depth in understanding of the business, familiarity with fairly advanced modeling and experimental research, and effectiveness in interpreting and framing results in support of decision making. But such a blend of skills is difficult to find in a single person, and costs for the best analytical talent can be prohibitive for many organizations. Principles for deepening the analytic talent bench with constrained budget includes the following:

- Shift analytics budget away from tool investments toward the acquisition of top talent. Once minimum requirements for data accessibility are met (which in today can be achieved at fairly low cost), money invested in better tools is rarely as productive as money invested in smarter and more versatile analysts.
- Continuously find new ways to unburden your best analysts by gradually building the capabilities of less expensive and more specialized talent.
- Integrate the analysts; locate them closer together and on projects that require more in-depth collaboration and peer coaching as this approach can offer significant, near-term impact on overall capability building and engagement.
- Prioritize capability building along with project execution when collaborating with expert consultants for analytics engagements.

Extracting Value from Current Data

Leading organizations excel at three key areas of multichannel analytics:

1) contact scoring and pipeline analytics,

2) conversion pathway and attribution modeling, and

3) structured experimentation.

Assuming a moderate level of information quality and accessibility, our research suggests that organizations can extract much more meaningful insight for decision support than they currently do. Three dimensions of particular importance include: gauging the size and health of their opportunity pipeline, identifying patterns of effective marketing interactions, and establishing cause-and-effect relationships (Figure 25). Although central to high-impact marketing analytics, organizations vary widely in execution, often for reasons that have little to do with data quality and more to do with the soundness of judgment applied in structuring the analysis. Outlined on the following pages are the common pitfalls that marketers stumble on and recommendations to overcome them.

Figure 25: Pitfalls Associated with Three Key Areas of Multichannel Analytics

Contact Scoring and Pipeline Analytics

The question this approach seeks to answer: What digital behaviors are most indicative of purchase decision-making stages for our customers?

The approach: Define stages that customers likely proceed through in purchase decision making and then map a range of specific behaviors and attributes to each stage to infer where a given contact and account is in their process and determine the overall health of the opportunity pipeline.

Pitfall: Pipeline analyses overemphasize contact-level web analytics data, neglecting important off-site and social behaviors and collective account-level behavior.

Conversion Pathway and Attribution Modeling

The question this approach seeks to answer: What quantity and sequence of digital touchpoints lead customers to desired conversion events?

The approach: Using web analytics data, identify patterns in the digital interactions customers have across a defined period of time leading up to different conversion events (e.g., completing a registration forms, downloading a mobile app).

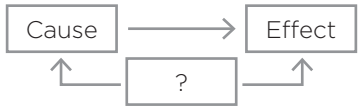
Pitfall: Attribution modeling is oversimplified, ignoring key aspects of a supplier's engagement with potential customers.

Structured Experimentation

The question this approach seeks to answer: What is the incremental impact contributed by a given tactic?

The approach: Drawing from the scientific method, design experiments that test hypotheses for the incremental impact of a given tactic (optimally in comparison with a control condition).

Pitfall: Experiments designs are lax, rendering results unreliable.



Contact Scoring and Pipeline Analytics

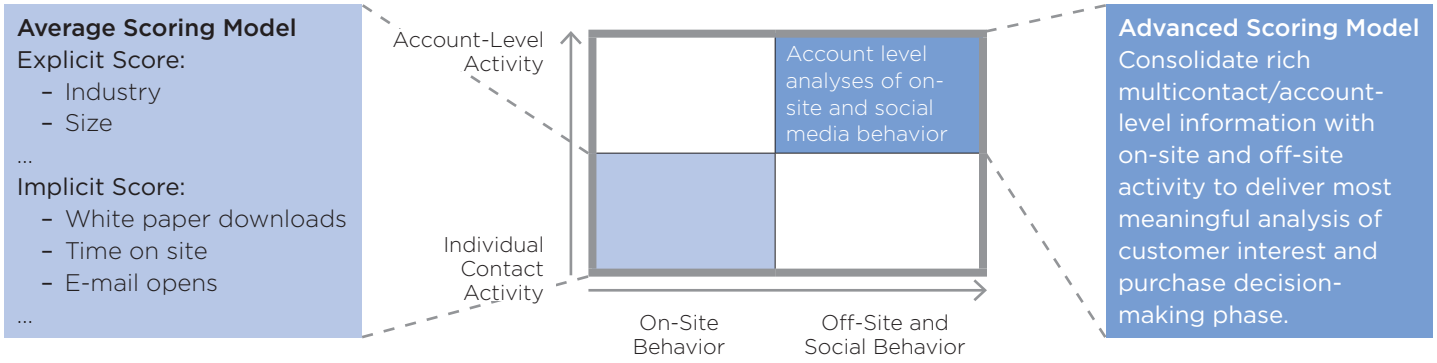
Leading companies are changing their lead scoring models to incorporate account-level analyses of both on- and off-site behavior, including social media.

Main Pitfall: Pipeline analyses overemphasize contact-level web analytics data, neglecting important off-site and social behaviors and collective account-level behavior

Most companies are replacing their outdated BANT survey approach to feed pipeline analytics (i.e., in which registration forms gating online content request specific information about budget, decision-making authority, scope of needs, and timeline for purchase). In its place, marketers are relying on models for combining observable characteristics and online behavior for individual contacts into aggregate "scores." The mere development of this approach, a key functionality of marketing automation platforms, has helped many marketers substantially improve their visibility into the pipeline, and help bridge their perennial divide with Sales. However, few marketers are pushing this more implicit scoring approach to provide the same account-level insight that the former BANT survey approach aimed for.

Most scoring models today mostly focus on the behaviors of individuals, despite widespread recognition that purchase decisions today are managed by groups, which oftentimes exceed 10 people for larger purchases. As a result, they fail to routinely uncover meaningful connections between individual behaviors across a buying center within a given account. In addition, we have seen many companies push harder to integrate available social media data into their scoring models—as the opportunities it opens up for customer profiling and data quality management can be tremendous. Leading companies are actively evolving their contact scoring models across both of these dimensions (Figure 26). The best companies have robust models for tracking and synthesizing all social behavior linked to a specific account and feeding that into customized nurturing programs and scoring systems used by Sales.

Figure 26: Paths for Expansion of Contact Scoring Models



Many companies are exploring in this space, but only a handful of companies have reached the level of socially informed, account-level evaluations. The closer marketers move toward this approach, the more accurate their picture of the opportunity pipeline will be, and the stronger guidance they will have for how to modify spend on digital tactics and support sales execution.

Conversion Pathway and Attribution Modeling

The best conversion and measurement models balance cost and complexity with value for decision making.

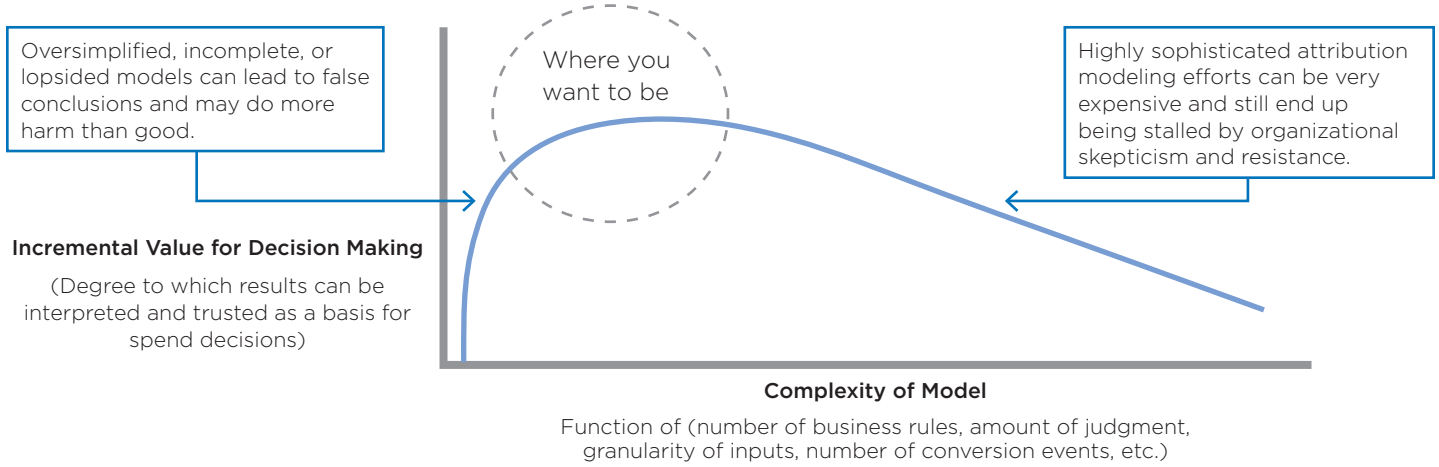
Main Pitfall: Attribution modeling is oversimplified, ignoring key aspects of a supplier's engagement with potential customers.

For many companies, each conversion event (e.g., a site visitor downloading a specific white paper) can have hundreds or thousands of different digital conversion pathways (i.e., the sequence of touchpoints occurring in advance of a conversion event). Similarly, many different models are possible for attributing credit across all of those digital touchpoints, and there is currently no proven methodology for determining any one model as being objectively correct. Many organizations are at a stalemate, unclear on how to proceed to more sophisticated digital measurement approaches without relying on arbitrary assumptions.

Beyond this issue is the fact that even the best digital attribution models are often out of context and proportion to the overall factors acting on potential customers. One consultant we interviewed rhetorically asks many of his digital marketing clients, "how can you stand in front of your [CXO] and start talking about all of the impact you've had on the business without even acknowledging that your company invests in activities outside of the digital world?" The lack of even nominal consideration for concurrent factors such as offline tactics (e.g., a trade shows) or external events (e.g., launch of a competitors' campaign) suggests a lack of business realism that weakens the credibility of digital measurement.

No single measurement framework can capture all of the factors influencing potential customers: top-down models are too broad, bottom-up models are too granular, and the two are difficult to marry. But reasonable decision support models can certainly be built that balance complexity and cost with value for decision making (Figure 27). Few B2B organizations have ventured very far down this path, however, and instead rely on a variety of oversimplified and oftentimes skewed model assumptions.

Figure 27: Hypothetical Marginal Utility Curve for Measurement Models
Illustrative



Conversion Pathway and Attribution Modeling (Continued)

Marketers finding success in their attribution efforts tend to follow two principles: 1) appropriate contextual framing of digital impact, and 2) defining clear tactics rather than just theory.

Marketers who are making significant progress in advancing their attribution modeling efforts tend to follow two principles below:

Appropriate Framing of Digital Impact in the Context of Broader Customer Influences

When analyzing conversion pathways and estimating attribution across multiple digital tactics, you are constrained by the web analytics data that you are using. However, this does not mean that you can simply ignore that more than one-half of your marketing budget (or at least some large percentage) is spent outside of the digital world. Although the data may not be integrated or easily accessible, at least framing digital impact in context and proportion to other spend categories will help improve clarity. This mentality will also clarify where targeted experiments to gauge interactivity between offline and online tactics would be most meaningful. Attribution should attempt to reflect the actual marketing strategy your organization is using in addition to the common pathways you think your customers are following. Moreover, there are many influences on customers that have nothing to do with your marketing efforts—such as the campaigns of competitors, events in the marketplace that spark a flurry of online activity, or even more general news and events outside of the marketplace. Adopting a basic framework for considering these factors can further boost the credibility of any estimation of digital impact.

Defining the Bounds Rather Than the Theory

Conversion pathway and attribution modeling can provide clarity on specific aspects of how your programs affect audience behaviors, answering questions such as the following:

- What three tactics most frequently initiate a digital conversion pathway?
- What are the most common "last clicks" or "second-to-last" clicks before a conversion event?
- Which touchpoints normally occur within the same day of a conversion and which occur much earlier?
- What is similar about the pathways for various conversion events and what is different?

This approach can be useful in presenting different pictures of how digital programs are performing and break free from default and oversimplified approaches. One analytics consultant recommended that organizations at a minimum create several different pictures of performance expanding from the most conservative view to more aggressive and inclusive views. For example, a conservative view would assign credit strictly to the most direct, lower-funnel touchpoints driving behavior (e.g., direct response to a paid search ad). A more aggressive view would assign weight to a wider range of factors, including display and generic search activities that took place in the upper-funnel. With this approach, marketers can gradually expand the scope of tactics considered in an objective way, leaving judgment to be applied only in the later stages of interpreting and acting on the findings.

After embedding these principles into conversion modeling efforts, any major questions or sources of political tension that emerge should feed directly into an inventory of questions to be answered or clarified with the application of targeted, structured experiments (as discussed on the following pages).

Structured Experimentation

Structured experiments are the best way to resolve competing hypotheses on how digital tactics impact customers.

Main Pitfall: Experiment designs are lax, rendering results unreliable.

To resolve competing hypotheses for how digital tactics affect customers, a structured experiment is typically the most effective tool. Many B2B companies apply experiments in extremely narrow circumstances (e.g., testing subject line effectiveness for e-mail campaigns) but are less active in tackling the bigger questions related to multichannel interactivity and performance in a rigorous way.

This is because the proper design, management, and interpretation of experiments require a great level of effort, understanding, and process rigor. Experiment designs that are rushed may lack adequate consideration of confounding factors and actionability of findings, and therefore may not convincingly support or disprove the debated hypothesis or provide a sufficient basis for decision-making.

However, to resolve many of the questions of digital interactivity and attribution, marketers must develop a greater capacity for structured experimentation. At the most basic level, this means establishing a more clearly documented and disciplined experimentation process, beginning with a standard basis for selecting new experiments (summarized in Figure 28) and the required completion and approval of an "Experiment Brief Template" (snapshot provided on the following page). This brief should clearly align to specific decisions of importance to budget owners and carry specific implications based on the results of the experiment.

Figure 28: New Experiment Review Questions

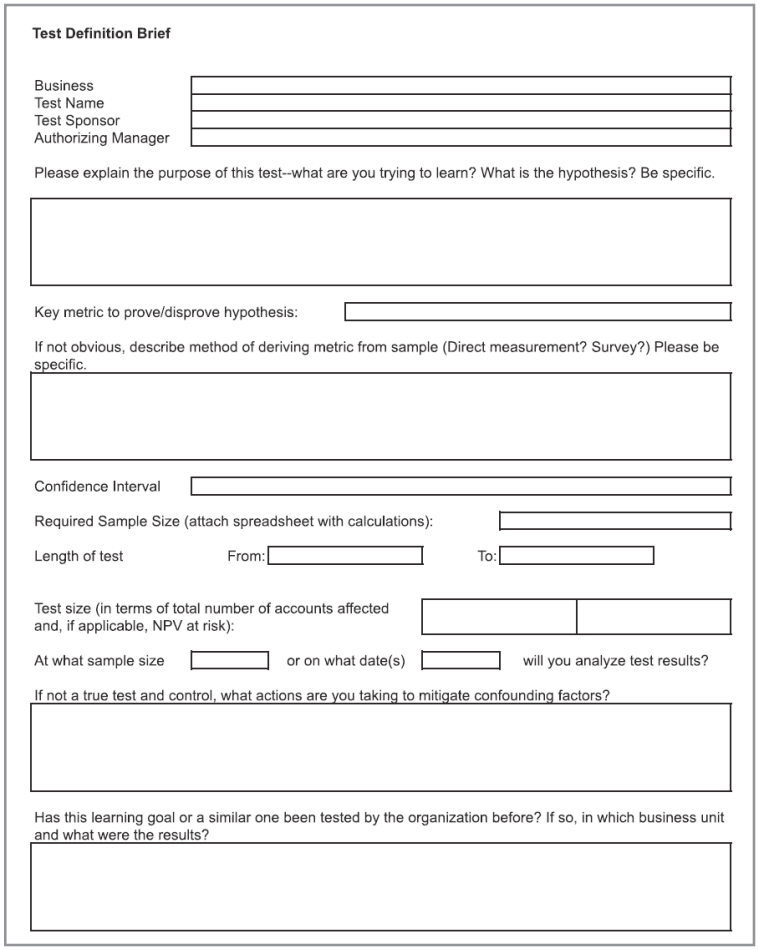
New Experiment Review Questions

- Will the experiment, as designed, get to the desired learning objective as efficiently as possible?
- Is the learning objective important to driving marketing effectiveness? Is it consistent with our strategy?
- Are there data we could look at to address the learning objective without requiring an experiment?
- Does the test metric "match" the learning objective?
- Will the proposed test size and length yield sufficient sample to achieve the learning objective?
- How will the experiment control for variations in test subjects?
- Have all reasonable influencing or confounding factors been identified and considered in the experiment proposal?
- Have we done this experiment (or a variation) elsewhere in the business? If so, does the learning carry over? If not, is this experiment getting at something worthwhile that is different?

Structured Experimentation (Continued)

This purpose of the Experiment Brief Template (Figure 29) is to force systematic definition of the learning objective, the hypothesis to be tested, the operational definition for testing the hypothesis, and specific parameters in terms of sample size and duration required to reach a meaningful conclusion. Perhaps most importantly, any test brief must explicitly identify how they are accounting for confounding factors (which could render any result unreliable). This due diligence and up-front clarity is essential for success in experiments.

Figure 29: Template for Clarifying Experiment Structure



Test Definition Brief

Business
Test Name
Test Sponsor
Authorizing Manager

Please explain the purpose of this test--what are you trying to learn? What is the hypothesis? Be specific.

Key metric to prove/disprove hypothesis:

If not obvious, describe method of deriving metric from sample (Direct measurement? Survey?) Please be specific.

Confidence Interval

Required Sample Size (attach spreadsheet with calculations):

Length of test From: To:

Test size (in terms of total number of accounts affected and, if applicable, NPV at risk):

At what sample size or on what date(s) will you analyze test results?

If not a true test and control, what actions are you taking to mitigate confounding factors?

Has this learning goal or a similar one been tested by the organization before? If so, in which business unit and what were the results?

The best organizations maintain prioritized list of critical uncertainties or debated hypotheses to be resolved via experiments. Without such a rigorous focus on structured learning, marketers may focus solely on meeting performance objectives at the expense of meeting learning objectives with each campaign. Organizations with disciplined experimentation process and a prioritized list of learning priorities can rapidly develop knowledge of channel interactivity and impact to improve overall marketing effectiveness over time.

Strengthen Multichannel Analytics

Key Findings from This Chapter

- The smartest companies dedicate a greater portion of their marketing budgets to improving their fundamental understanding of effectiveness, interactivity, and causality across marketing programs.
- A central hub for marketing data is becoming more common but is still a long-term aspiration for many companies. Regardless of the data environment, marketers should be focused primarily on extracting insight and decision-support value from the data they do have (which is a lot of data). The single most important factor for success is getting the smartest people you can find to tackle your most important analytical challenges. Ninety percent of your analytics spend should be on people.
- Pipeline analyses often overemphasize contact-level web analytics data, neglecting important off-site and social behaviors and collective account-level behavior.
- Conversion attribution modeling efforts typically ignore key aspects of a supplier's engagement with potential customers (especially nondigital touchpoints). Marketers should make a greater effort to place estimates of digital impact in proper proportion and context of broader marketing strategy and the market environment.
- Experiments are difficult to design are often executed poorly, rendering results unreliable and wasting time and money. It is a worthwhile effort to create very strict process guidelines to validate experiment design in advance of execution, so results can be confidently applied to decision making.

Recommendations

- Does your team have any kind of a formal learning plan? Gauge how dedicated people are to "learning" as a distinct objective as this mentality is a necessary basis for making fundamental progress overtime. Without this mind-set, efforts will be skewed to the demands of most current campaigns, with little attention for how to transfer deeper knowledge of channel interactivity and effectiveness to future campaigns.
- See if your organization's approach to pipeline analytics has been updated in the last year. Too many organizations go through a robust process to develop the methodology, and then let it remain static. You should also be regularly validating the predictive power of your methodology (i.e., by seeing how effective it matches up to actual pipeline performance) and identifying opportunities to enhance the model. Be aware that progressive companies are expanding their methodologies to provide account-level views or integrated social and other off-site behavior is possible as this can substantially improve on pipeline transparency and predictive power.
- Look for opportunities to cut conversion pathway data to expose new light on the value of tactics, and see where structured experiments could be designed to empirically validate what the best course of action might be. Start by zooming in on areas where you think tactics are probably being over-credited (or under-credited) by the current approaches to budget allocation.

Take the Online Diagnostic

To help you evaluate your organization's progress in analyzing performance and interactive across digital channels, we created a self-assessment based on the findings presented in this chapter. At the site for this research there is a tab labeled Self-Assessment that provides information and access to the survey. You can also participate in the self-assessments for the other chapters of this research.

http://www.executiveboard.com/exbd-resources/content/digital-evolution/analytics/index.html