


Cognitive Psychology: The Missing Piece in Your Data Strategy



It's time to understand
“how” and “why” your
audience makes decisions.

Cognitive Psychology: Unlock the Motivators Behind Your Audience's Behaviors

IN THE DIGITAL UNIVERSE where business competition is fierce and advertising is relentless, marketers need every advantage they can get to reach the right customer with the right message. Many give themselves a better chance of doing exactly that by using big data and predictive analytics to anticipate the 'who', 'what', 'when', and 'where' of consumer actions.

Even though we live in the era of "big data", marketers often struggle to get their hands on information that also answers the question "Why?". Why and how do consumers make their purchase decisions? What motivates them to take action? As James Kobiellus, IBM Data Science Evangelist states, "Most pop psychology that pervades marketing is shallow...and largely unsupported by solid academic research." With a perceived shortage of data based on true cognitive science, marketers are often missing a critical piece of their data puzzle, one that can help them better personalize consumer interactions, optimize campaigns and predict future needs.

Cognitive psychology is the scientific study of the mind, focusing on the way people process information and then understanding how this translates into behaviors.

To solve this problem, AnalyticsIQ has pioneered a sophisticated approach to curating data by pairing cognitive psychology with data science. In fact, we are so focused on understanding the 'why' that our team is comprised of industry veterans, data scientists and even cognitive psychologists. Our team is on a mission to get to the heart of the psychological motivators and predictors that fuel consumers' decisions.

"The science of psychology—why people are doing what they are doing—in traditional marketing research provides a great complement to what can be measured."

ERIC BRADLOW, PROFESSOR OF MARKETING,
THE WHARTON SCHOOL



Taking a Scientific Approach to Surveying Consumers

While some parallels exist, predictive marketing analytics and cognitive psychology are uniquely different fields. Yes, both rely heavily on scientists, surveys, and statistics to expand the breadth of knowledge available. However, it is unreasonable to expect a marketing data scientist to grasp every nuance and intricacy needed to develop reliable surveys and psychological scores. It is also unreasonable to expect a cognitive scientist to successfully build predictive data products. Each discipline clearly brings data expertise to the table that the other does not. This is why AnalyticsIQ believes firmly in a blended approach.

For example, surveys are a common method used in both psychology and marketing to collect additional consumer data and insights. Often times, data companies or marketers will survey consumers directly. In theory, this sounds like a great approach, just ask your subjects directly for their feedback to a few questions you have. However, self-reported survey results are not always trustworthy. Frequently, people are not the best barometers of their innermost motivations and characteristics. There is also no guarantee that every respondent interprets and answers a particular question as intended. For example, survey respondents cannot be asked bluntly if they believe they possess a certain trait. Every respondent will answer the question based on a slightly different interpretation of the trait, and whether they perceive it as positive or negative.

Taking an expert, psychological approach to capturing and analyzing this data can be a game changer. Cognitive psychologists are armed with the skills to overcome these initial hurdles and produce dependable survey results that can fuel strong predictive models. For example, instead of

asking respondents if they possess a certain trait, a better survey may ask if they have previously engaged in explicit behaviors that speak to the psychological factor being explored. Having a collection of responses that can only be answered in a definitive manner gives data analysts a much more reliable and predictive dataset to model for marketing analytics. Because the type of thinking that comes from years of studying cognitive processes is the foundation of reliable survey-based research, it cannot be abandoned after survey construction.

“Psychological research requires a lot of testing, and a lot of surveys.”

HANNAH AUGUR,
RESEARCHER, DATAECONOMY

Taking a scientific approach to cognitive data starts with the survey design. Points that a psychologist must consider include the number of question variations asked, how the questions are worded, the response options and where questions are positioned relative to others. This cognitive approach greatly increases the chances of producing a stable survey. While these considerations may seem intuitive or subtle, each element snowballs into a single effective survey that leads consumers to provide valid responses.

Valid Results Drive Better Performance

We are humans after all. So no matter how many measures are taken to remove the bias and corruption from survey responses through sound design, some respondents will simply not provide quality information. This leads to incorrect, inconsistent or missing data, which is a big problem for marketing data scientists. Their job relies on sound data so they can “crunch the numbers” and reach their desired output. Any marketing data scientist will tell you, clean data is the key to a powerful, predictive model.

How does psychology assist with this critical data cleansing? By purposefully designing surveys based on a sound psychological foundation, we

can validate accuracy through data comparisons. For example, if a respondent answers a question in one manner and then answers a similar question asked through the same cognitive lens with conflicting feedback, this is a sign their responses may be inaccurate. On the contrary, if every response related to the cognitive motivation being examined provided by an individual is consistent, the information is most likely valid. Think of this process as the “cognitive validation” that takes place before the “analytical validation”, which is done by distributing the same survey to another random, survey-panel.

“ Cognitive processes are the fundamental pathways through which we make decisions, access memories, and communicate. Having knowledge of these gives us a fresh perspective on predictive analytics and consumer choices.”

SARAH CAVRAK, PHD, CHIEF COGNITIVE PSYCHOLOGIST, ANALYTICSIQ



TOP 5 REASONS SURVEY RESPONDENTS MAY LIE

1. Respondents want to appear better than they are.
2. Respondents give socially desirable answers.
3. Respondents may avoid sensitive, personal questions.
4. Respondents want to give the answer they believe the researcher is seeking.
5. Respondents believe they can influence the outcome of the research in their favor.



Can Algorithms Predict Human Behavior Better Than Humans?

AnalyticsIQ believes that providing the right, cognitive-based data is like handing a marketing a crystal ball. You can see into the future, anticipate the desires and needs of your audience, accurately identify your next best customer and even predict campaign outcomes.

This is why AnalyticsIQ has developed a comprehensive data set that leverages the intrinsic motivators and values of consumers to predict their future decisions. Our proprietary blend of sophisticated analytics and psychology puts us in a position to provide marketers with actionable insights. Clients have the power to customize content, messaging and offers that speak to the psychological decision drivers of their target audience.

If you want to improve your marketing across channels and know your customers better than they know themselves, let's talk.

Are you ready start using sophisticated data to grow your business? Our flexible approach makes it easy. Whether you are looking to test data, build custom models, or target prospects across channels, AnalyticsIQ can be your partner.



Contact us today at sales@analytics-iq.com.



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