

Market Research in the Age of AI and Big Data

► In a competitive and global business environment, pharmaceutical companies are starting to become wiser when it comes to using market research to explore, test, and refine their market strategies.

Market research-based strategies are only as good as the quality — and quantity — of the data. With the rise of artificial intelligence, machine learning, and big data, life-sciences companies now have more insights at their disposal to help them formulate current and future strategies across their business units.

While slower to adopt AI than the retail and financial industries, the pharma industry is now exploring AI. Experts predict that during 2018, AI will give companies more predictive insights, more quickly, and at lower costs. These insights will need to be matched with qualitative solutions to better understand the why behind the data.

Market Research in Real Time

AI creates opportunities for companies to gain real-time insights that can quickly be translated into smarter marketing opportunities. Combined with big data, pharma market researchers can quickly gain insights into patient behavior, practitioner prescribing habits, and treatment effectiveness.

Using big data and AI, researchers are also able to explore social media discussions more fully. For example, healthcare professionals increasingly use social media channels to discuss brands, treatments, and opinions with colleagues. By listening to these conversations, through the aid of AI-enabled social listening, pharma market researchers gain insights into actual conversations rather than relying on traditional methods such as surveys.

Big data means going beyond traditional data sources and integrating external data in market research, such as preferences and behaviors of customers (often gleaned from social media) to augment traditional data. This can help companies spot new market trends, understand variations in markets, and generate

growth. Understanding trends and events could help companies to mitigate a health crisis, deal quickly with a product issue, or respond to a new competitor on the market.

Eventually, by bringing together real-time analysis of opinions across multiple forums with fast analysis of structured and unstructured data, and then further expanding with intelligent analysis, companies will gain new and deeper insights.

The Role of Technology in Market Research

Market researchers need to be where their customers are, and typically today that means on mobile devices. Some companies are using mobile research to gather detailed information at the point of prescription, for example,

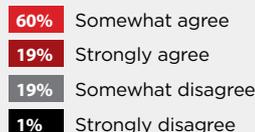
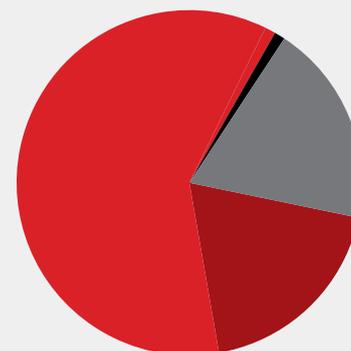
Combining Market Research and Big Data

Paired with insightful market research, big data offers many potential benefits, including:

- Giving a holistic view of the customer (practitioner or patient)
- Determining future behavior by combining past actions with context
- Refining future marketing strategies by combining existing data with analytics on customer behavior
- Understanding the patient journey and future motivations
- Providing insights on where to innovate
- Bringing data to life and make them relevant

AI Will Revolutionize Marketing

PERCENTAGE OF U.S. B-TO-B MARKETERS WHO AGREE



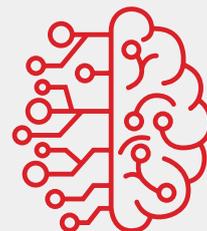
Source: Demandbase

60% of marketing leaders expect AI to improve campaign analytics, digital asset management, and insight collection.

Source: Salesforce

The percentage of marketers planning to prioritize AI over the next year is up 17% since 2016.

Source: Newbase



through the use of short on-screen questionnaires and then making the findings available in real time. Mobile research could be used in many circumstances, such as testing a launch campaign, testing the use of devices, or conducting conference research, to name a few.

Competition across the industry also means

companies need to respond quickly to market trends. As IBM said in a 2014 study, the value driver for big data has shifted from volume to velocity.

Speed is imperative, but in the life sciences so too is quality and so it's imperative that the research that will inform marketing decisions

is gathered from true customer insights. That will mean finding a careful balance between sound methodology and agile research, experts believe.

Having access to more data and being able to gather real-time analysis through AI allows market researchers to identify more patterns.

EXECUTIVE VIEWPOINTS



Rob Blazek, R.Ph.
Senior VP, Networks & Analytics,
Rx EDGE Pharmacy Networks

BALANCING THE ART AND SCIENCE OF RESEARCH

Real paradigm change will require striking a thoughtful balance between the “art” of marketing and the “science” of research. The key is to use both disciplines hand-in-hand to drive the most efficient, effective, and nimble strategies while maintaining the core tenet of every pharma marketing plan — namely, the ability to put relevant information into the hands of the right patients at the right time.



Kathleen Bonetti
Executive VP of Marketing,
Rx EDGE Pharmacy Networks

PARTNERING FOR VALUE DELIVERY

Patients, caregivers, and healthcare providers have a whole new set of

expectations today regarding how they consume information about pharmaceutical brands and make treatment decisions. This reality is, in large part, driven by advances in technology coupled with dramatic changes in the healthcare delivery landscape. The pace of change and the data that go along with it can be overwhelming. Researchers will increasingly look to key partners and providers to help them put the data in context and sort out the marketing approaches that will deliver the most value.



Kurt Mussina
VP, General Manager,
Frenova Renal Research

UNDERSTANDING WHAT PATIENTS WANT

Through instant Web communication, remote monitoring, real-time clinical trial performance information, mHealth devices, physician portals, and other technology, we obtain better market research and intelligence to improve our insight into patient behavior. We must understand why patients do or don't participate in studies, what they like or dislike, and what

can be improved. When we understand what patients want — not just what we think they want — we will be able to design studies successfully for sponsors, investigators and patients.

DRIVING STRATEGY THROUGH DATA INSIGHTS

Data insight drives strategy, especially when it comes to understanding and reaching complex patient populations. It's critical for us to understand how changes in standard of care, business practices, protocol design, and processes, as well as changes in commercial, government, and payer relationships affect patients, investigators, and sponsors. Because each patient is unique and his or her conditions are often complex, this insight enables us to develop successful strategies that keep patients in mind.



Tom Nolte
Head of Business Analytics,
Research Partnership

IN-THE-MOMENT EXPERIENCES

We are at the stage where patient ▶

But market researchers will need to remain vigilant about the why behind the data and that requires more than simply the ability to analyze the data.

Big Data and AI

Big data and AI will allow researchers to build more sophisticated strategies as data collection is made more efficient and accurate. For example, instead of spending time writing

reports, natural language processing can generate reports based on keywords or subjects. It frees market researchers from the time-consuming task of data collection. By automating data collection and the report writing process, market researchers can focus instead on the real objective — the customers, be that patient or physician.

The use of AI in market research also removes the human bias element inevitable with person-to-person interviews. At the same time, however, AI serves to enhance the role of

the market researcher — not replace it — by providing insights that otherwise would not have been possible and allowing the researcher to focus on understanding the emotions, attitudes, and values behind the findings.

Experienced market researchers understand that decision-making about brands is often based on human cognitive biases and emotions, and AI as it stands is not equipped to understand that side of human behavior. Furthermore, in such a complex area as life sciences, market researchers need in-depth knowledge of the industry. It will therefore be imperative that market researchers take findings from big data and AI and provide a human element to the interpretation of the data.

In addition, big data provides a retrospective and offers a big picture perspective of trends; however, to get perspectives on a specific issue, market researchers still need to conduct primary market research.

Adapting to the Future

Undoubtedly the human element in market research will remain front and center, but pharmaceutical companies must adapt to the new paradigm of machine learning, AI, and big data when it comes to gathering and weighing market insights.

Pharma companies might be advised to incorporate data scientists with market researchers to sift through the massive amounts of data now being gathered. These individuals can provide smart analysis on the data, but it is the market researcher who should be depended on to provide insights on customer behaviors.

Some experts see the role of market researcher expanding to incorporate community perspective, customer service management or advocacy expertise, also focusing on deeper insights behind customer behavior. These elements could provide fascinating new market research perspectives for companies when combined with the capabilities enabled by new technologies.

More broadly, most experts believe that the future for market research lies in bringing together AI, big data, and technology preferences (such as mobile) with primary market research and the expertise of knowledgeable pharmaceutical market researchers. 

EXECUTIVE VIEWPOINTS

► comfort with technology and its pervasiveness among nearly all adult patient groups actually gets us closer to their in-the-moment experiences. This provides us with a better understanding of patient’s emotional and rational responses that many firms claimed, but never really had. There is no longer concern that employing app and smartphone technologies will skew the sample toward the younger/healthier patient populations — or that patients will be expected to recollect an experience long after the actual event.

TRUE-TO-LIFE PATIENT MOTIVATORS

As patient data come ever closer to real-time experiences demonstrating “hot” and “cold” cognition, insights and marketing science experts can dive into true-to-life patient motivators. I think of the implications for device development first, which requires lots of observational research, then to new drug development. We will know that we’ve hit that depth when our findings shift from those too-rational patterns to real human experience and emotion.



Steven Simoneschi
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BEHAVIOR MEASUREMENT

The blend of new research in cognitive science should dramatically alter the nature in which market research is conducted. Market research relying on subjective attitudes of consumers should be replaced by research focusing on measurement of behaviors after an intervening variable, such as price change, is introduced.

MOVE BEYOND THE SUBJECTIVE

Future strategies should focus on research guided by behavioral changes of consumers. Surveys and questionnaires have proved to be unreliable in the information they provide and are often flawed in their conclusions. It is better to rely on measuring the behavior of consumers rather than attempting to predict future behavior by subjective questions.