















Switching Your Marketing Off Autopilot To Fly with Powerful Velocity

Finding Success in a Challenging Pharmaceutical Environment with **Marketing Analytics**

By Dr. Andrée Bates, President, Eularis







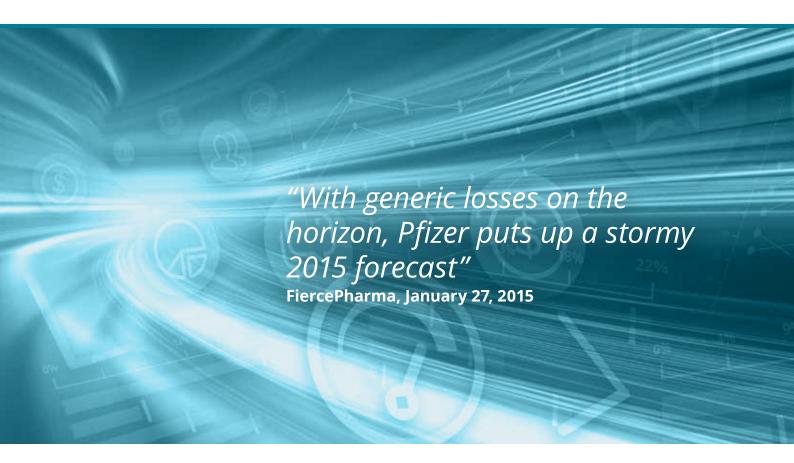




Contents

Part 1 - Operating on Autopilot	03
Current Cultural, Market, and Environmental Constraints: Challenging and Frightening	05
Part 2 - Retaking Control for Accelerated Growth	10
Time for Disruptive Innovation	11
The Perfect Storm	11
Big Data Analytics	13
Pharma Without Big Data and Analytics	15
Part 3 - Flying with Velocity	19
Implementing Predictive Analytics	21
Part 4 - Analytics-Driven Success	25
About the Author	27
About Eularis	28





PART 1: Operating on Autopilot











PART 1: Operating on Autopilot

The headlines tell the story. The global pharmaceutical industry has been in crisis for several years. The good old blockbuster days are gone and pharmaceutical executives need to adapt to the new normal. This includes the patent cliff (which is no longer in the future, but here today), healthcare reform, intense regulatory pressures, changing customer expectations (patients, payers, and physicians), medicine and technology advances, intense competition, cost-containment pressures, and new and unexpected players to contend with.

One study found that 75 percent of pharmaceutical company executives believe that the industry is in the midst of a strategic crisis driven by price and cost pressures, regulatory changes, and expiring patents.1 In a perfect world, this tsunami of challenges would drive companies to rethink their

business models to focus on health outcomes, reinvent their brands, and refocus their marketing with their customers firmly at the center.

Unfortunately, too many pharmaceutical companies are still operating their marketing strategies on autopilot, paying lip service to the transformative changes occurring in the industry, and, in the process, failing to provide true value to their customers or shareholders. Which helps explain why, in the face of rising sales, profits have actually dropped over the past 10 years.1

Many in pharma have tried modifying their business models to produce products less exposed to research and development (R&D) and market risks, including generics, biosimilars, vaccines, over-thecounter medications, and medical technologies such as ingestible sensor chips), while cutting costs and payrolls.

Such approaches may be helpful in the short and possibly mid-term, but to realize long-term sustainability companies need to turn their model upside down and move from a product-centric model to one that truly addresses the needs of their customers and meets the ultimate goals of healthcare reform: improved population health, improved quality, and reduced costs.

They aren't even close to meeting those goals.

"The traditional business model at big pharma relies on (i) identifying promising new blockbuster drugs; (ii) conducting large, expensive clinical trials; and (iii) if successful, promoting the drugs with extensive marketing and sales presence in developed countries. Clearly, the traditional model cannot be sustained in today's environment."

Kessel M. The problems with today's pharmaceutical business--an outsider's view. Nature Biotechnology. 2011;29(1):27-33.

To realize long-term sustainability companies need to turn their model upside down and move from a product-centric model...

di

¹ Roland Berger Strategy Consultants. Global Pharmaceutical Industry is in a Strategic Crisis -- Business Models Must be Adjusted 2013. http://www.rolandberger. com/press releases/513press archive2013 sc content/ Pharmaceutical industry in a strategic_crisis.html

By Dr. Andree K Bates www.eularis.com











Current Cultural, Market, and Environmental Constraints: Challenging and Frightening

As noted earlier, the pharmaceutical industry faces numerous challenges as we move into 2015 and beyond. They include:

The shift to a value-based healthcare system.

A basic tenet of healthcare reform is the quest for improved quality and reduced cost. This, in turn, is driving a dramatic rethinking of the traditional fee-forservice reimbursement system to one in which reimbursement is based on value (defined as quality/cost) as it applies to the health of not just individual patients, but populations.

One result of this is changing formulary management strategies. In 2013 in the US, nearly half of all health plans had moved to formularies based on clinical outcomes, while another 20 percent planned to implement such formularies in

2014; 40 percent had created formularies based on value, while 16 percent planned to do so in 2014; and a third were using big data (analytics) to influence formulary decisions and clinical guideline development, while 24 percent planned to do so in 2014.2

We are seeing a move to clinical-based formularies throughout the developed world, with increasing emphasis on the value of pharmaceuticals. In 2014 alone, the National Institute for Health and Care Excellence in the United Kingdom declined (or recommended that the drug be declined) 11 high-priced drugs, citing cost compared to efficacy.3

Health plans – and employers – are increasingly looking for head-tohead and comparative effectiveness studies, as well as real-world evidence in making any formulary decisions.² As the authors of a report on value-based reimbursement and the pharmaceutical industry noted: "Value attributes (e.g., outcome or performance variables of interest) must be collected, measured, valued, aggregated, and converted (using a decision rule) to evaluate whether the value metric was achieved. Also, there must be a consensus program of data collection, typically initiated early in the commercial life cycle."4

Where is your data coming from? What data are you collecting? And how are you using it to identify and communicate the value of your products?

Changing delivery models.

Today, more providers are salaried employees, bound by their organization's prescribing policies, which often limits sales rep access to providers and restricts them to organizational formularies. In addition, the growth of accountable

- ² EMDSerono. EMD Serono Specialty Digest, 10th Edition. 2014.
- ³ National Institute for Health and Care Excellence. 2014 press releases. Available at: http:// www.nice.org.uk/news/pressrelease-archive?start=2014-01-01&end=2014-01-31 - press-archive-2014. Accessed February 6, 2015.

Where is your data coming from? What data are you collecting? And how are you using it to identify and communicate the value of your products?

> ⁴ Deloitte Center for Health Solutions. Value-based pricing for pharmaceuticals: Implications of the shift from volume to value. 2012. http://webcache.googleusercontent.com/search?q=cache:ivIPoOvC-n0J:deloitte. wsj.com/cfo/files/2012/09/ ValueBasedPricingPharma.pdf+&cd=4&hl=en&ct=clnk&gl=us&client=firefox-a.

By Dr. Andree K Bates www.eularis.com











care organizations (ACOs), which share risk for the health of populations and the cost of care, is also altering prescribing behavior. This, in turn, requires that pharmaceutical companies identify innovative ways to market in this new environment. Such changes require greater use of data to meet the needs of individual customers.

Pushback on specialty drugs.

Specialty drugs have been one of the bright spots in the pharmaceutical industry, accounting for nearly 30 percent of total pharmacy spend on the commercial side in 2013, despite accounting for less than 1 percent of all US prescriptions. Spending on specialty drugs increased 14.1 percent that year, and is expected to increase another 63 percent by 2016. This is driven, in part, by high-priced hepatitis C (HCV) drugs entering the market. At the same time, spending on six of the top 10 traditional therapy classes dropped, primarily because of lower unit costs.⁵

Yet state systems and commercial insurers globally are pushing back against these high-cost drugs. Plans are designing special formularies for specialty drugs, implementing oncology pathways to reign in costs, and shifting coverage from the medical benefit to the pharmacy benefit, which may put greater financial responsibility on patients. Indeed, 61 percent of commercial plans (75 percent of covered lives), and 87 percent of Medicare Advantage and prescription drug plans, charged a co-insurance rather than co-pay for specialty drugs in 2013.² In late 2014, state Medicaid directors sent an eight-page letter to Congress urging "an immediate federal solution" to the cost of specialty drugs.⁶

Providers are also pushing back. In April 2013, an international coalition of cancer experts released a call to action decrying the "astronomical" cost of certain drugs. The letter followed the actions of oncologists at New York's Memorial Sloan-Kettering Cancer Center in 2012 who publically refused to prescribed the drug Zaltrap (ziv-aflibercept) for colon cancer because it was twice as expensive as similar therapies. Their outcry eventually led the drug's manufacturer to slash the price in half.⁷

These efforts are having an effect; Sanofi and Gilead Sciences Inc., which makes the high-priced hepatitis drug Sovaldi, reported lower-than-expected sales in the third quarter of 2014.⁶ Add the threat of biosimilars for many specialty drugs, and it is clear that this lucrative arena is under attack.

To combat the risk of significant revenue loss from these drugs, manufacturers need to determine pricing and marketing based on more than just recouping research investment and hitting profit goals. Analytics must include the effect of pricing on increasingly cost-conscious private and public payers, as well as the true value of the product. For instance, cost-benefit analyses of Solvadi

Analytics must include the effect of pricing on increasingly cost-conscious private and public payers, as well as the true value of the product.

By Dr. Andree K Bates www.eularis.com

⁵ The Express Scripts Lab. The 2013 Drug Trend Report. April 2014. http://lab.expressscripts.com/drug-trend-report/ introduction/year-in-review.

⁶ Associated Press. States ask Congress to intervene on drug prices. October 28, 2014. http:// www.stltoday.com/news/ special-reports/mohealth/statesask-congress-to-intervene-ondrug-prices/article_7fd33393f196-5731-a5ea-0b2cbb71dec5.

⁷ Bach PB, Saltz LB, Wittes RE. In Cancer Care, Cost Matters. The New York Times. October 14, 2012.











finds it is more cost effective than current treatments for HCV.8-11 But how do manufacturers get that message to their customers in the most effective way? That's where predictive analytics comes in.

Intensified competition.

There is significant competition in most therapeutic areas as companies focus on "me-too" drugs, particularly in diabetes and oncology. With numerous diabetes drugs already on the market and more than 100 clinical trials ongoing, this trend shows no signs of dissipating. In addition, the competition from generics and biosimilars, which can compete on price, just adds more difficulties to brand marketers' jobs.

Direct-to-physicians sales disappearing.

Sales force numbers continue to shrink, with a recent report finding the US sales force dropped 7.4 percent in North America. The decline of the past few years is the result of fewer blockbuster drugs, reduced access to physicians (one study found that half of physicians restricted visits from reps), lower sales, the need for shortterm results to satisfy shareholders, and the availability of digital detailing.¹²

Loss of innovative pipeline drugs.

The number of truly innovative new medicines approved by the US Food and Drug Administration (FDA) and other major regulatory bodies around the world over the past five years has plummeted, with 50 percent fewer new molecular entities (NMEs) approved in 2010 compared to five years before. In 2008, just a third were first in class; a year later, that number had dropped to 17 percent. ¹³

Resource pressures for sales and marketing.

In times of economic stress, company leaders are forced to think conservatively and focus on the short term. The goal becomes protecting current revenues and profits, leaving expansion and long-term planning for the future.

Since sales aren't driving revenues, companies have turned to cost cutting to make their numbers. In 2011, Merck began to slash its workforce by 12,000 to 13,000 jobs as part of a plan to squeeze another \$1.5 billion from its annual cost base by 2015. The squeeze on profit is understandable with several recent patent expirations, including the blockbuster Singulair in many countries.

Merck is not alone. According to a report from the Institute for Policy Studies, 119,000 pharma jobs have been cut since 2008. Phizer was responsible for more than 50,000; Bristol-Myers Squibb for more than 9,000; Eli Lilly more than 6,000; and Novartis 2000. Even more have occurred since paper went to press.

Commoditization of brands.

Many pharmaceutical marketers have allowed the commoditization of brands. In other words, the brand is too similar to its competitors; indeed, it is interchangeable (as we see in the formulary model).

- ⁸ Hagan LM, Sulkowski MS, Schinazi RF. Cost analysis of sofosbuvir/ribavirin versus sofosbuvir/simeprevir for genotype 1 hepatitis C virus in interferon-ineligible/intolerant individuals. Hepatology. 2014;60(1):37-45.
- ⁹ Petta S, Cabibbo G, Enea M, et al. Cost-effectiveness of sofosbuvir-based triple therapy for untreated patients with genotype 1 chronic hepatitis C. Hepatology. 2014;59(5):1692-1705.
- ¹⁰ Pho MT, Linas BP. Valuing cure: bridging cost-effectiveness and coverage decisions for hepatitis C therapy. Hepatology. 2014;60(1):12-14.
- ¹¹ Saab S, Gordon SC, Park H, et al. Cost-effectiveness analysis of sofosbuvir plus peginterferon/ ribavirin in the treatment of chronic hepatitis C virus genotype 1 infection. Aliment Pharmacol Ther. 2014;40(6):657-
- ¹² Wasserman E. Pharma sales force took a hit in North America and Europe in 2013, new report shows. Fierce PharmaMarketing. April 15, 2014. http://www. fiercepharmamarketing.com/ story/pharma-sales-forcetook-hit-north-america-andeurope-2013-new-reportshows/2014-04-15. Accessed December 4, 2014.
- ¹³ Paul SM, Mytelka DS, Dunwiddie CT, et al. How to improve R&D productivity: the pharmaceutical industry's grand challenge. Nat Rev Drug Discov. 2010;9(3):203-214.

By Dr. Andree K Bates www.eularis.com



ılı

...relying solely on these

data points to inform

marketing decisions is

paramount to marketing

negligence.









A 2006 study found that numerous brands, including Cialis/Viagra, Allegra/ Claritin, Nexium/Prevacid, and Vytorin/Crestor, were perceived as highly commoditized, meaning they were purchased based on price alone. The study found that such brands were even more commoditized than Dunkin' Donuts vs. Starbucks.14

The message here is that marketers are doing worse than coffee shops in differentiating their brands. This is particularly troubling in a world in which

generics are the norm and biosimilars are poised to enter the highly lucrative specialty pharma market (indeed, they already have when you consider the first biosimilar approved in the US, Zarxio (Neupogen)).

Poor customer engagement.

Pharmaceutical companies have traditionally organized their customer engagement models around their products, not their customers. Even when they do consider the customer, they are primarily thinking of prescribing clinicians, not patients and payers. Customer-focused companies seek out opportunities to transparently engage all their customers in the most appropriate channels based on the needs, values, and behaviors of each group.

That means articulating desired outcomes from the customer perspective at least five years before launch, if not earlier; examining real-world evidence to identify unmet needs; and pinpointing patients who would benefit most from the product.

Lack of analytics-driven marketing.

The tools typically used to inform decisions in pharma include brand awareness, brand and competitor perceptions, message recall, message evaluation, share of voice, prescription intention, prescription adoption, brand share, brand-switching behavior, brand loyalty, detail follow ups, quality and quantity of calls, call satisfaction, rep quality perceptions, and company image perceptions. While they all have their place, they will not, on their own, significantly increase market share.

Given the numerous analytical tools available today, relying solely on these data points to inform marketing decisions is paramount to marketing negligence.

> ¹⁴ Clancy K, Krieg P. Your Gut is Still Not Smarter Than Your Head. New York: John Wiley and Sons; 2007.

By Dr. Andree K Bates www.eularis.com

© Copyright 2015 Eularis

8













Provenge: An Epic Fail

The first-ever cancer vaccine, Provenge, was hailed as a major breakthrough when it was approved in 2010, with news reporters writing that its manufacturer, Seattle-based Dendreon, "has made history." 15 Shares of Dendreon skyrocketed 15 percent when news broke of its approval.

But sales? Not so much. By 2012 Dendreon announced it was cutting 600 jobs and closing a production facility. Why? "The company stumbled in its early marketing days and now faces an increasingly serious competitive onslaught," analysts wrote. Dendreon announced additional layoffs in late 2013 and, in late 2014, filed for bankruptcy.

Company officials had a list of excuses for the drug's poor sales, including high turnover among sales reps, cancellations among patients who started the process, and "dips" in demand from oncologists and academic centers. Analysts listed other reasons: the company priced the drug too high (\$93,000 for a single course of treatment), oncologists didn't believe the cost was worth the benefit, and Dendreon had two competitors nipping at its heels - each with a better product.

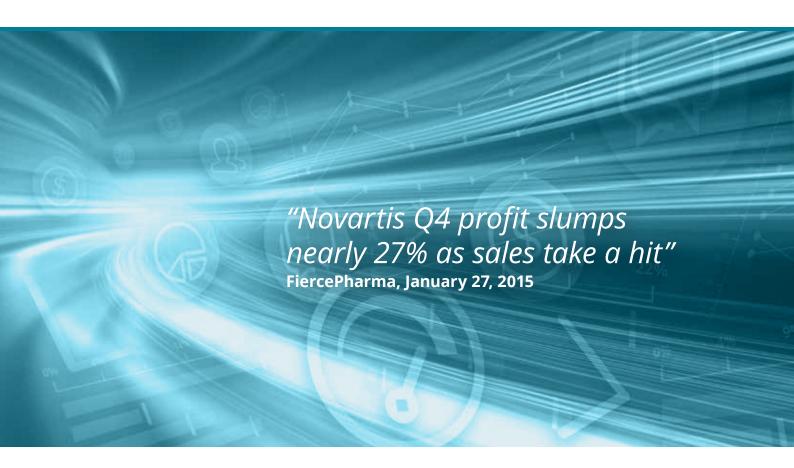
It all boils down to one thing: Dendreon didn't identify the value it would bring to its customers, didn't market that value, and didn't shift its marketing approach as soon as it became clear that its current marketing strategy wasn't working.

We can, with complete confidence, say that they didn't use data and analytics to guide the launch and early marketing. Thus, Dendreon completely missed that all-important window of opportunity to lead the market in the treatment of late-stage prostate cancer.

¹⁵ Timmerman L. Dendreon's Big Question: How Much Will People Pay for Provenge? . XConomy. April 29, 2010. http://www.xconomy.com/ seattle/2010/04/14/dendreonsbig-question-how-much-willpeople-pay-for-provenge/. Accessed January 1, 2013.

By Dr. Andree K Bates www.eularis.com





PART 2:

Retaking Control for Accelerated Growth











Time for Disruptive Innovation

Accelerated Growth

A 2013 Accenture survey of 200 sales and marketing executives at large pharmaceutical companies found that 11 percent were planning a wholesale redesign of their sales and marketing organization in response to constrained budgets and the revolution in stakeholder engagement. A third of analytics executives and 36 percent of sales executives surveyed said their company has room for "significant improvement." 16

We agree. Successful marketing must be linked to revenue and profit, not gut feeling, subjective outcomes, or even sales (which don't always equate to profit), but by real-market-data driven analytics. This provides companies with a thorough understanding of their customers, their own and their competitors' products and drivers, and the current regulatory, economic, and policy background. Only then can they develop an integrated marketing plan designed to drive growth.

Change Coming

It appears that pharma does plan to change. In the Accenture survey described above, 87 percent of respondents indicated they plan to increase their use of analytics to target spend and drive improved return on investment (ROI), while 56 percent cited it as one of their top five business priorities. In addition, 92 percent expect to increase their use of third-party service providers in analytics,.¹6 However, about 60 percent of respondents reported redundancies in their analytics efforts and difficulty using analytics to boost efficiencies.

The Perfect Storm

The pharmaceutical industry is in the midst of a perfect storm of disruptive change. To survive and thrive, they must reinvent their marketing using analytics, particular in the following areas.

Patient empowerment and patient centricity.

As patients become more informed and empowered they become more demanding. Today, more than 70 percent of patients with online access use the Internet to find health information. Forty percent diagnose their own condition and then have a physician confirm.¹⁷ The more information they have the more they begin to make value-based decisions about their treatments and reject higher-priced drugs if that is the only engagement they have with the product. If pharma does not join this online dialogue with their patients and influence it, they will lose the opportunity to shape it. Thus, it is vital that pharmaceutical marketing address patient centricity.

By Dr. Andree K Bates www.eularis.com

¹⁶ Accenture Life Sciences. Life in the New Normal: The Customer Engagement Revolution. 2014. http://www.accenture.com/ us-en/Pages/insight-pharmaanalytics-digital-commercialsurvey.aspx.

¹⁷ Chilukuri S, Rosenberg R, Van Kuiken S. A digital prescription for pharma companies. McKinsey & Company. http:// www.mckinsey.com/insights/ health systems and services/a digital prescription for pharma companies.











Digital pharma.

Digitally enabled marketing is here but most pharmaceutical companies aren't ready. 18 Despite access to unprecedented data and innovative digital approaches that can be used to drive better health outcomes by influencing customer behavior, few pharmaceutical companies are exploring digitalengagement models. Instead, they are relying on a product.com, some eDetailing, and social media, none of which are driving the results they could realize if they fully embraced digital marketing.

Moving beyond the pill.

To remain competitive, pharmaceutical companies need to "think beyond the pill." ¹⁸ In an era of "me-too" drugs many companies see their marketing USP as the bundle of services they provide with the pill rather than the pill itself.

Yet there are more analytics today that can be used to identify an opportunity for marketers to use their marketing to better drive sales. That means expanding from the traditional focus on therapeutic interventions—whether going upstream into diagnosis and prevention and wellness activities, or downstream into treatment monitoring and follow-up; offering data and healthinformation services in addition to drugs, or maybe even care-management expertise or care delivery.

Big data and analytics will be a critical factor in this new beyond-the-pill strategy, as the range of medical and healthcare devices like wearables and other patient-centric technologies have improved, less-expensive diagnostic equipment is available in physicians offices, and electronic health records provide ever-increasing quantities of information that enables a greater level of engagement between the pharmaceutical company and individual patients.

"The engagement becomes the product," says Joseph Kvedar, director of the Center for Connected Health at Partners HealthCare. "The therapeutic is almost a giveaway or marketing expense. There aren't many better ways to develop a relationship with a patient than through a prescription for a medication to treat a chronic illness."

Focus on outcomes and real world data.

Both access to and the quality of real-world data are increasing exponentially, spanning everything from electronic health records to social platforms, healthcare claims, demographic trends, and genomic insights.¹⁹

The advantage of competing on outcomes is that it focuses competition on what really matters to patients: delivering high-quality care in a costefficient fashion. Transparency of patient results can align incentives so



- ¹⁸ Cattell J, Chilukuri S, Knott D. Beyond the pill creating medical value through technology enablement McKinsey & Company. https://http://www. google.com/search?q=Beyond+th e+pill+creating+medical+value+t hrough+technology+enablement &ie=utf-8&oe=utf-8.
- ¹⁹ Clawson J, Lawyer P, Schweizer C, et al. Competing on Outcomes: Winning Strategies for Value-Based Health Care. bcgperspectives. January 16, 2014. https:// http://www.bcgperspectives. com/content/articles/ health_care_payers_providers_ biopharma competing on outcomes_winning_strategies_ value_based_health_care/.

By Dr. Andree K Bates www.eularis.com

12



Once you understand

the power of analytics,

you can move

from measuring to

understanding.









that payers, providers, suppliers, and patients all work toward the same goal, making it possible for the market to effectively manage the tradeoffs between cost and quality.

In this world of outcomes-based competition, drug companies and device makers that cannot demonstrate that their products genuinely add value will suffer. Winners, by contrast, will be those that build a sustainable competitive advantage through better access to and analysis of real-world data; deeper insights about how to improve outcomes; and more effective collaborations and partnerships to develop value-adding innovations.

Big Data and Analytics

Analytics is about using custom-tailored data to make better decisions, quicker. In the pharmaceutical industry, it is about using data to gain a thorough and deep understanding of your customers and their perception of the value a drug can offer. Then using that knowledge to drive a winning marketing strategy.

The quality of the data is critical. Historical data or analogues are highly unreliable in the dynamic pharmaceutical market, with most ROI, promotional response, and econometric predictive models failing to consider current market confidence (i.e. customer perceptions, customer sentiment, customer dynamics, customer, brand equity).

The algorithms must be predictive, so they account for current and future environment rather than the past. They must also be validated against current and past prescribing behavior and, most important, they must answer the questions of "What is happening now," as well as "What will happen in the near future?" Only then can you begin to allocate resources and make the necessary changes for success.

Without this approach, you cannot use the results to answer the crucial questions of which resources and marketing approaches are required for future success. Like a good soccer player, you want to run to where the ball will be, not to where it is. Predictive analytics allows you to do that.

Once you understand the power of analytics, you can move from measuring to understanding. Companies are competing with analytics in their marketing, not just because they can, but because they must. When many drugs are me-too drugs and the differences between drugs within a class shrinks, analytics is the only sustainable way to wring every last drop of value from the products.

Marketing teams that use analytics will learn what their customers value and

By Dr. Andree K Bates www.eularis.com











want, what prices they will pay, what triggers them to make the specific choices, and much more. Based on this knowledge, they can design marketing to take maximum advantage of this enhanced understanding of their customers.



Eularis Case Study: 3-Year Market Decline Transformed Into Double-Digit Growth in Just 6 Months

Spending more but selling less

This once-successful brand had been in slow decline for several years.

Trying to turn things around, the company increased sales and marketing spend dramatically to double that of its largest competitor. They forecast that this would strongly improve their market share from the 12.3% they'd had in June the previous year. Yet by January the brand had dropped to 10.2%.

Also, the client was spending a lot of money on strategies that were poorly planned and executed. They had a negative ROI and felt unsure how to allocate their budget across the marketing mix to halt the brand's terminal decline.

Desperate to stop the rot

The client predicted they could fall to just 8.5% market share in just a few more months unless things changed for the better. That's when they came to us to ask for help on how best to focus their efforts.

We looked at brand performance, messaging results, the marketing mix and sales force effectiveness.

Our research soon showed which key messages were most likely to boost sales - and which they could cut completely. Especially since they were

By Dr. Andree K Bates www.eularis.com









confusing physicians with too many messages in their desperation to improve sales. The results also showed what sales reps should focus their time on within a detail call. And there was more.

In addition, our research revealed:

- Which communication activities were not having any impact on prescribing and could be dropped.
- Which activities should be increased, and how much budget to divert from poor-performing activities to high-performing ones.
- How to allocate the rep and communications budgets for optimal market share gain.

We were even able to predict the market share response for any marketing activity, which gave the client more confidence to make the necessary changes.

Increasing market share from 10.2% to 19.3% in just 6 months

The brand's market share went from 10.2% to 19.3% in the six months after the first analytics were carried out. And this after almost three years of continuous decline. Eularis Case Study: 3-Year Market Decline Transformed Into Double-Digit Growth in Just 6 Months.

A month later, our analysis suggested the brand's activities would support a market share of 23.7%. As of January this year, the brand actually hit a market share of 23.8%.

Now the team re-use the system every six months to keep ahead of changes in the market.

Although many companies are embracing analytics, very few in pharma are proficient at using it. Even when the company has analytics departments, many are using poor-quality, incomplete data sets that provide erroneous and misleading information. To really utilize the power of analytics in marketing, companies must use both strong analytics and strong data sets. One without the other leads to incomplete picture of the situation.²⁰

Pharma Without Big Data and Analytics

The industry is littered with poster children of failed launches. Why? Because the companies failed to thoroughly analyze what drives greater value to their customers pre-launch and then, once the product launched, failed to address the resulting problems.

A good example is Zaltrap® (ziv-aflibercept), a colon cancer drug that Sanofi launched in 2012 with the astounding (but not unusual for cancer biologics) price tag of \$9,600 per month. Its closest competitor was Avastin® (bevacizumab),

By Dr. Andree K Bates www.eularis.com

²⁰ McGuire T, Manyika J, Chui M, et al. Why Big Data is the new competitive advantage. The Ivy Business Journal. July/August 2012. http://iveybusinessjournal. com/publication/why-big-data-isthe-new-competitive-advantage/ - .VKZ6F1r0SRM.











which was just as effective and selling for about \$4,583 per month. A few months after launch, Zaltrap was in the new after a group of oncologists at New York's Memorial Sloan-Kettering Cancer Center publically refused to prescribed the drug because of its cost. Sanofi eventually slashed the drug's price by half, but the damage was done. The public was left with the perception that Sanofi tried to get rich on the backs of dying cancer patients. Clearly, the company had not used data and research to determine its pricing strategy.

Sanofi also had challenges when it launched its anti-arrhythmia drug, Multaq (dronedarone) in 2009. Investment bank Morgan Stanley predicted that Multaq could garner sales of €3 billion a year. That was high, but even Citigroup predicted to

have sales between \$1.3 - \$1.9 billion. Not to be. Turns out the drug was linked with a higher risk of liver, cardiovascular, and lung disease which then created concerns about using as front line therapy. In France it was set a low reimbursement rate and restrictions on use were recommended. In addition, the US Food and Drug Administration warned against prescribing it for patients with permanent atrial fibrillation (the drug is approved for AF patients in sinus rhythm with a history of paroxysmal or persistent AF). By the end of 2012, sales stagnated at \$570 million according to Reuters, far short of the billions the company had banked on.

Sanofi is not the only company to crash and burn at launch. Consider AstraZeneca and its oral anticoagulant, Brilinta® (ticagrelor). Analysts predicted sales of \$2.7 billion by 2015. However, it was not to be as the FDA required more data analysis and concerns the drug began to seed. By the time they eventually won FDA approval in July 2011, many analysts had cut expectations, although a few still had blockbuster predictions. But they had already lost 6 months and had limited time to make an impact. They needed a strong launch hitting all relevant driver messages and driver promotional channels and strong analytics should have been conducted to show the teams how to do this. However, this was not done effectively at the time, and although during third quarter 2011, they managed to create \$15 million in sales but then in quarter 4 2011 they dropped back to \$5m in sales. Fortunately they did improve in 2012 and steadily moved up to \$9m in Q1, \$18m in Q2 and \$24m in Q3 but then began fighting generic versions of Plavix. The launch was not well executed and Berstein analyst Time Anderson stated that it was one of the most disappointing new drug launches in the industry.

These failures were all largely due to poor payer and pricing strategies, as well as a failure to communicate the value of the products to payers and physicians and lack of use of strong analytics to guide them. These companies could have shifted their approaches after a careful analysis of the data, but did not. For instance, they could have negotiated creative pricing approaches around discounts; or perhaps implemented a risk-sharing approach.

These failures were all largely due to... ...and lack of use of strong analytics to guide them.

> By Dr. Andree K Bates www.eularis.com











In all cases, they failed because they failed to use analytics to fully understand how to capture the market effectively.



Eularis Case Study: Hitting 38.8% market share just 1 year after launching by using good analytics

A fiercely competitive market

A top 10 pharma firm was about to launch a new product in the highly competitive therapeutic category. They knew it wouldn't be easy, so they asked us to analyze their messaging and marketing mix so they could have a better idea of how to position the brand at launch – and how best to reach their target audience.

Preparing for a successful launch

We consulted with the client to work out what they needed to know and how best to get that information. To get the right positioning, we knew we needed to work out what were the core messages having the most impact on sales in the category. Plus which promotional channels were the most influential for getting physicians to prescribe.

We conducted research with the client's target market - first twelve months before the launch, and again six months later. We analyzed this data, along with competitor data and the new product's clinical trial results.

We inputted these results into our brand performance accelerator, messaging results accelerator and marketing optimization accelerator. This gave us an assessment of the brand's market share potential, as well as telling us what messaging and channels to use – and the best ways to target their market.

Continued overleaf

By Dr. Andree K Bates www.eularis.com











With this information, the client was able to plan its marketing efforts for optimum growth.

The consultants said "cut the budget". They were wrong...

Six months after launching successfully, the client got us to analyze the data from the launch so they could tweak their efforts according to the new recommendations.

At this point the client also brought in a consultancy, who suggested cutting the marketing budget. However, we were able to use our analytics to show that this would be a mistake. If the client cut its spending, sales growth would stall.

The client decided to ask us to incorporate our sales force effectiveness accelerator to get the full picture of all its sales and marketing activities. They then trained their reps in line with the results to change the way they did detailing with prospects.

The budget was allocated in line with the mix recommended by our marketing mix optimization accelerator. The results spoke for themselves. From a successful launch to a high-growth product, the brand soon became one of the market leaders.

Market share of 14.3% within 1 month – rising to 38.8% within a year Within one month of launch the product already had a 14.3% share of the market. At six months, this had gone up to 27%, and hit 38.8% by the end of the first year – making it one of the market leaders. All from following our recommendations.

The client repeated the same analysis every six months thereafter to ensure they were constantly up to date with any changes in the market or the competitive landscape. This allowed them to continuously refine their sales and marketing in line with what the evidence said.

The brand continues to be a market leader in this category, despite several competitor launches since.

By Dr. Andree K Bates www.eularis.com





PART 3: Flying with Velocity











PART 3: Flying with Velocity

Analytics is the biggest game-changing opportunity for marketing and sales since the Internet. That statement often prompts vigorous head nodding from executives, but is quickly followed by head scratching. "How can we make this happen?"

The key is to focus on the big decisions for which, if you had better data, predictive ability, and optimization of that data, you'd have greater sales.

Let's compare two different companies. The first has a range of products. Every year they update their strategic plan and allocate their budget, making small changes but generally following the same approach as the previous year.

The other company runs analytics and continually analyzes the results of its business units, shifting budget allocations based on this strong analysis of products and market opportunities. Not surprisingly, the second company is growing significantly more than the first, which appears to only post profits from cost-cutting exercises.

The second company, although roughly the same size as the first a few years ago, is now worth close to 65 percent more. Sadly, many pharma companies resemble the first company far more than the second.

When McKinsey and Company reviewed 1,600 US companies, including pharmaceutical companies, between 1990 and 2005, it found that one-third of the marketing department received almost exactly the same budget as the previous year. Thus, despite all their strategic planning and budget allocation exercises, they made only small, sometimes no, changes in allocation.

Given how much better companies that seriously examine the market and the opportunities each year perform compare with those that simply do the same thing over and over, it is surprising that more companies are not doing everything in their power to succeed.

The McKinsey research indicates that those companies who seriously examined marketing opportunities each year and allocated their budget accordingly perform better than those that just allocate the same or less every year. In addition, companies making significant reallocations were 13 percent less likely to experience a hostile takeover or bankruptcy. Finally, CEOs who allocated less to marketing budgets in their first three years on the job were significantly more likely to be removed in years four through six. Marketing must build a strong case using measurable prescriptive analysis to demonstrate to senior management that increased investment can deliver.



By Dr. Andree K Bates www.eularis.com









IBM conducted a survey with over 1,000 business executives from more than 60 countries in 2014, and found four major shifts impacting the businesses.²¹

- 1. A solid majority of organizations realize a return on their data analytics investments within a year.
- 2. Customer centricity still dominates analytics activities, but organizations are increasingly solving operational challenges using big data analytics.
- 3. Integrating digital capabilities into business processes is transforming organizations.
- 4. The value driver for data analytics has shifted from volume to velocity.

But just managing the volume and variety of data is no longer enough to outperform competitors. IBM found that the components that differentiate organizations most are those capable of creating an agile and flexible infrastructure, one designed to manage data efficiently and move it through the analytics process quickly.

Implementing Predictive Analytics

Integrating a marketing analytics model into your marketing activities does not have to be a daunting task. All it requires is three steps.

1. Identify the best analytical approaches for your needs.

Evaluate the benefits of the many available tools and methods to determine which best support your strategy. It may be helpful to use a typical analytics maturity model, shown in Figure 1.



Figure 1. Analytics Maturity Model

By Dr. Andree K Bates www.eularis.com

²¹ Analytics: The speed advantage. Why data-driven organizations are winning the race in today's marketplace. IBM Global Management Services. October 2014. http://public. dhe.ibm.com/common/ssi/ ecm/gb/en/gbe03624usen/ GBE03624USEN.PDF



To get the most from

this, you should be

looking at predictive

and prescriptive

analytics









Sadly, the majority of pharmaceutical companies fall into the descriptive (e.g. market research alone) category, using heuristics, attrition modeling, simple historical data, and promotional response curves as their best tools, which don't work. To get the most from this, you should be looking at predictive and prescriptive analytics.

2. Integrate capabilities to generate insights.

Although some companies rely on just one analytical technique, the greatest returns come when multiple tools are used in concert. An integrated approach, which includes pulling in direct-response data and insights, reduces the biases inherent in any one method and provides business leaders with the flexibility required to shift budgets toward activities that produce the most bang for their buck.

3. Put the analytical approach at the heart of the organization.

It's not uncommon for marketing teams to outsource analysis or throw it over the wall to an analytics group. When the findings come back, however, those same teams may be reluctant to implement the recommendations because they don't fully understand or trust the numbers.

To solve that problem, marketers must work closely with the team doing the analysis to ensure that everyone is working from the same assumptions and objectives. Speed and agility are also important. Compare actual results with target figures as they come in, with the mix and budget adjusted accordingly.

The companies that succeed in their marketing today do six things well with their analytics:

- 1. Start with a specific problem and stay focused. For example, say your market share is flat or in decline and a competitor is beating you. Use analytics to understand where the competition has the strongest edge, and how and where they are vulnerable. What about pre-launch planning, where you need to ensure that your brand has the optimal messages and channels to accelerate uptake upon launch? Analytics is the perfect tool to examine these kinds of issues.
- 2. Start with strong data. Data is the foundation of everything. If you don't use the best data, you will not have an accurate solution. Historical data or analogues are highly unreliable in the dynamic pharmaceutical market, with most ROI, promotional response, and econometric predictive models failing to consider current market confidence (i.e. customer perceptions, customer sentiment, customer dynamics, customer, brand equity) and market data.
- 3. Understand the customer. Data must come from your customers. Without understanding what is driving them, you will not be able to impact your

By Dr. Andree K Bates

www.eularis.com







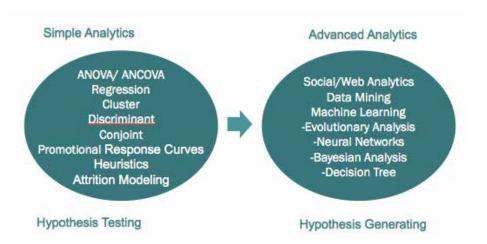


results. The trick, however, is to ensure that you get customer insights but don't not rely on them as fact, since, as Malcom Gladwell wrote in his bestselling book Blink, consumers rarely know what truly influences them.

For instance, when the American Medical Association (AMA) asked doctors what influenced them in terms of writing a prescription, then compared the results to what the doctors actually did, the AMA found that the doctors were not aware of their real influencers.

One needs to be wary of such findings, since they can bias any market research on consumer influences. Analytics, on the other hand, integrates customer insight data with market share and sales to uncover the real influencers understand the customer more than they understand themselves.

Always keep in mind the adage attributed to Henry Ford: "If I asked people what they wanted, they would have said faster horses." That means understanding the customer not through focus groups, but through data and math. Simply put, the industry needs to follow Eularis and move from the simple analytics techniques that have been used for decades, which are simply hypothesis-testing approaches, to include more complex advanced analytics, which are hypothesis-generating approaches. The diagram below shows where the industry is with the simple analytics and some of the techniques we add to this to ensure strong powerful and reliable results.



4. Focus on the most valuable opportunities. There will always be many things you can change to impact sales and market share, but do you have the budget for all of them? No. So stay focused on the changes that provide the fastest results, and use analytics to help you identify what they are.

By Dr. Andree K Bates www.eularis.com











- 5. Create easy-to-understand data. It wonderful to have great data, but if it's difficult to understand and use, it's worthless. You need a program with a simple interface that doesn't require an advanced degree in statistics to understand. An executive from one of the top five pharmaceutical companies described how he spent two years working on the company's internal analytics approach but none understood it, so were not using it. Instead, the people providing the analytics need to make the results understandable to people who do not have PhDs in math so they can understand how to use it.
- 6. Move quickly. You don't want a process that will take six months or longer to provide answers. Remember: time is of the essence. You want the data to be current - not six months old—so you can make real time changes to effect sales and profit within the next quarter, not the next year.

By Dr. Andree K Bates www.eularis.com





PART 4: Analytics-Driven Success











PART 4: Analytics-Driven Success

Today's pharmaceutical industry is nearly unrecognizable from the industry of just 10 years ago. The so-called "patent cliff," the end of the blockbuster drug, the advent of personalized medicine, consolidation and new practice models on the provider side, greater demand for value, and, of course, the tsunami of change that is healthcare reform, driven by the Affordable Care Act, requires that companies throw out the old ways of doing business and the old thinking about how to sell their products.

They need to embrace change and identify opportunities to better understand and target their customers - who are no longer just private practice physicians, hospitals, and payers, but who now include patients and, to an ever greater degree, employers, ACOs, integrated delivery systems, even pharmacy chains like Walgreens, with their minute clinics.

None of this is possible without the use of analytics: big data driven by mathematical modeling that can identify problem areas and potential as accurately as threading a needle. Future competitive benefits are likely to accrue to companies that can not only capture more and better data but use that data effectively.



Analytics ushers in the possibility of a fundamentally different type of decisionmaking. It enables companies to test and generate hypotheses and analyze the results so they can guide investment decisions and operational changes. In effect, experimentation can help managers reduce the variability of outcomes while improving financial and product performance.

It is time, then, to take your company off autopilot and begin driving pharmaceutical profits not by cutting budgets and personnel, but by using hard data and predictive analytics to identify the value your products provide and market them appropriately.

> By Dr. Andree K Bates www.eularis.com













Dr Andrée Bates

Dr. Andrée Bates is a pharmaceutical industry veteran with 30 years in the industry and 20 years working specifically in pharma Al. She brings blended expertise in Artificial Intelligence (AI), Pharmaceuticals, and Strategy. Dr. Bates has led Artificial Intelligence powered projects for numerous top-tier pharmaceutical companies in diverse areas such as clinical trials and R&D, market access, regulatory, medical affairs, and sales and marketing. These have all resulted in measurable growth in revenue, profit, and market share for her clients. Having worked in the pharmaceutical industry since 1993, and AI in Pharma since 2003, she has a detailed understanding of the pharmaceutical environment and how AI can be leveraged compliantly and effectively. She has authored many articles in peer-reviewed journals and industry reports. She has also been a guest lecturer on Healthcare Innovation and Al in multiple university MBA programs: INSEAD Business School (Fontainebleau), the Erivan K Haub School of Business at St Joseph's University (Pennsylvania), Fordham University (New York) Global Healthcare Innovation Management postgraduate program, and Bayes Business School (Formerly Cass Business School – The University of London), and she lectures on AI for Boards at Henley Business School at the University of Reading, as well being a guest speaker in numerous internal pharmaceutical company meetings and international conferences in UK, USA, Latin America, Canada, France, Germany, Spain, Hungry, Poland, Japan, China, Singapore, and Australia.













About Eularis

Eularis exist to help biopharma and healthcare commercial teams who want to weave FutureTech like Artificial Intelligence (AI) and Machine Learning (ML) and Virtual Reality (VR) and Augmented Reality (AR) and Internet of Things (IOT) to solve their challenges and deliver unprecedented measurable results.

The Eularis team of experts have extensive qualifications combined with many years of real-world experience in both biopharma and AI companies. The mix of qualifications (MD, PhD, MBA, M. Sc., M Engineer.) along with prior experience in executive-level positions in top 20 pharmaceutical companies ensures our clients have the right strategic and tactical questions solved and planned with cutting edge technology and Al. You have access to Pharma Al Futurists, Pharma Board level team, and AI Strategists, and Data Scientists and Big Data Engineers and Developers to ensure you are playing at the top of your game.

Every project is unique and begin by developing a deep understanding of your strategic needs and your data. Then, we plan the right approach to meet your strategic needs and transform your performance.

Learn more

eularis.com



TRY ONE OF OUR CORE SERVICES

AI STRATEGIC BLUEPRINT

Give us your most difficult challenges to solve with AI and FutureTech!

The problem of poor AI impact comes down to a lack of strategy and pre-strategy. We know AI is impressive, and we see the results all around us. So why do many pharma AI project never pass the pilot stage? There is a plethora of evidence as to why not having a strategic AI blueprint before you begin is problematic and leads to project failure. We create strategic AI blueprints to ensure all AI projects meet the company's strategic objectives and move the needle for maximum impact.

AI DEPLOYMENT BLUEPRINT

Ensuring the key foundational elements required for success in your Al FutureTech projects are in place.

In the pharma environment, we face unique challenges. Knowing where you want to go is one thing, but the trap many then fall into is ensuring that the key foundational elements are in place (e.g., finding the right data, getting through internal legal and compliance, buy vs build, tech planning SOW, choosing the optimal AI vendor etc.) so that you can execute quickly. Our deployment blueprint accelerates your ability to industrialise the opportunity effectively by taking care of all these foundation pieces enabling you to easily commercialize the most effective solutions rapidly and seamlessly.

AI MODEL IMPLEMENTATION & TECH BUILD



End-to-end solutions focused AI and tech implementation

Tech implementation from end-to-end including tech project planning, implementing security procedures, data discovery, data staging, data preparation, data Al modelling (with ML, NLP, Generative Al etc) model evaluation, UI/UX creation, integration services, software integration and cloud services, perform testing and quality controls and launch.

Contact us



Connect with Us









