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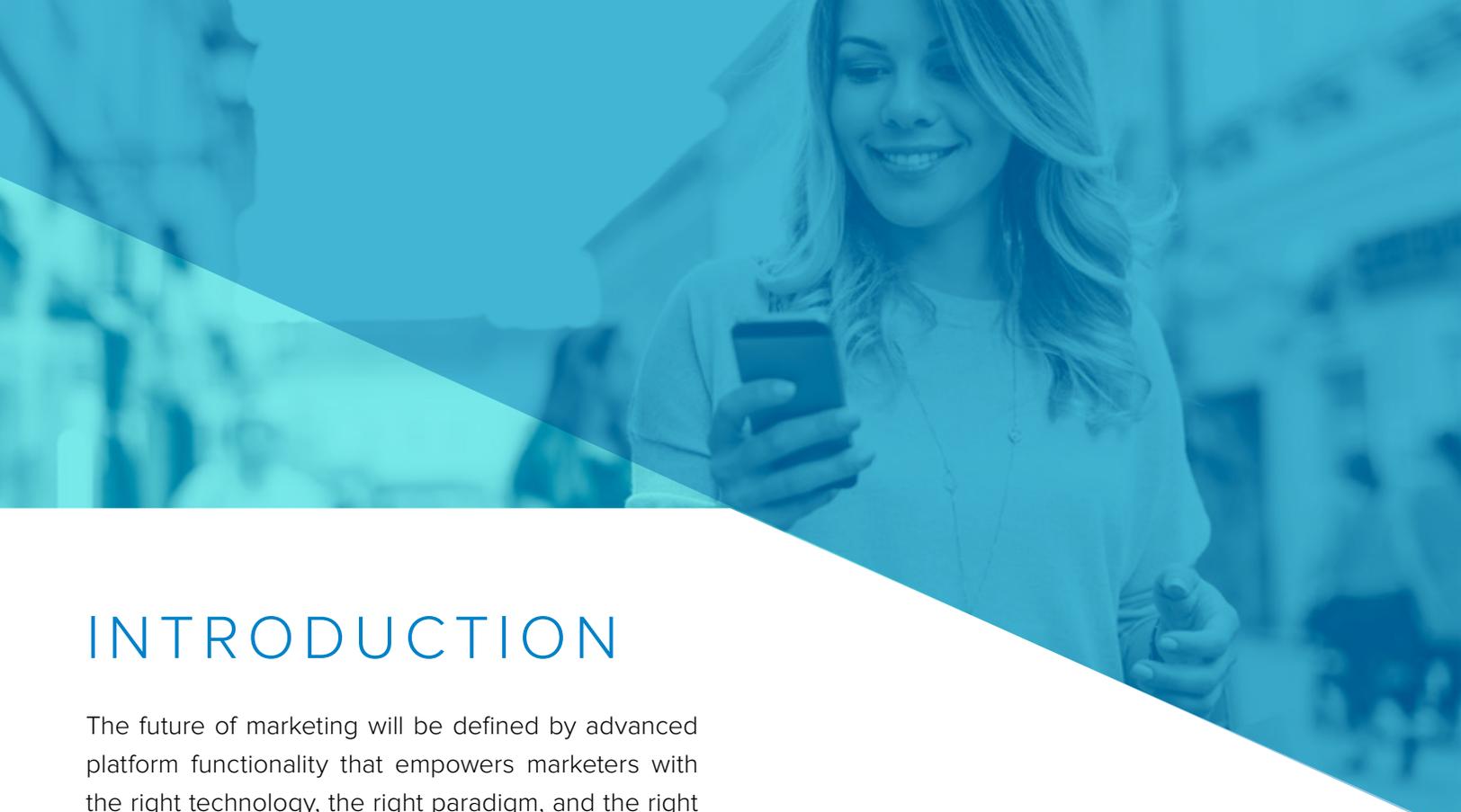
THE FUTURE OF PLATFORMS

The future of marketing will be defined by advanced platform functionality



THE FUTURE OF PLATFORMS

Executive summary: By looking at anecdotal evidence and by analyzing the past two years of reports from three of the marketing industry's top research firms (eMarketer, Forrester, and Gartner) we know that there is industry-wide emphasis on four key topics with relation to marketing platforms: customer experience, data practices, artificial intelligence, and virtual and augmented reality. The maturation of these topics, and industry experts' continued focus on them, lends insight into what we consider to be the future of platforms. Or, more specifically, what the maturation of marketing technologies means for the evolving ecosystem of platform providers, customers, and marketing professionals.



INTRODUCTION

The future of marketing will be defined by advanced platform functionality that empowers marketers with the right technology, the right paradigm, and the right practices for engaging audiences with experiences that matter at the right time and in the right place. Anil Mathews, founder and CEO of Near, notes that

A converged platform has a lot to offer—from richer analytical insights, leading to focused product development, in turn leading to higher Return on Investments.¹

Andrea Rily, CMO of Ally, echoes the sentiment:

[We need a platform to understand] at a customer-level, personas, needs, wants, and preferences and delivering them in a meaningful way through the channels they prefer to be communicated in.²

In the new digital reality, marketers cannot continue to stress broad relationships with consumers when more personal relationships are needed, and indeed, expected. Developing more personal relationships

1 Mah, P. (2017, February 17). Two trends marketers need to watch out for in 2017. CMO Innovation. Questex Asia Ltd.

2 Niazi, U. (2017, January 11). Top Growth Marketing Trends for 2017. Blueshift. Blueshift Labs, Inc.

requires an infrastructure capable of generating intelligence and a means of acting on that intelligence. As Jennifer Putney, VP at Prudential, explains about marketing's future:

It's going to be much more direct to the individual. It's going to be about creating that direct connection and trust with the individual on a much more personal level. Marketers are going to have to get a lot smarter.³

Marketers need an integrated platform that supplies the functional foundation for both insight and action, and empowers brands and agencies to incorporate first- and third-party data to produce optimal marketing outcomes. The level at which a platform is integrated can be illustrated in a shared universal user ID space, the ability to influence decisions at any touchpoint—not just through advertising, but combining paid and

3 Cardon, M. (2016, December 5). CMO.com's Top 10 Marketing Trends For 2017. CMO.com. Adobe Systems Incorporated.

owned channels—and the ability for relevant variants to emerge based on their ability to impact an outcome. Within this context, the unified platform is whatever an enterprise considers to be the interface through which they can access data holistically, manipulate it based on new information appended to the system, and make informed business and marketing decisions as a result of the intelligence garnered. But not all platforms are created equal, and not every platform will evolve and survive in the competitive landscape. Those that succeed will do so not because of brand recognition or overall market position, but because the functions they enable, and the functionality they include over time, effectively prepare marketers to step into the future rather than lag behind it.

Hence the question: How will the future of platforms most likely look?

MAKING PLATFORM PREDICTIONS

Marketing platforms have grown from simple email marketing campaign managers. These forebearers to modern digital marketing platforms revolved around a simple if/then equation: “if a customer takes this action, show this response.”⁴ Of course, these types of marketing campaigns tend to get messy when you factor in millions of potential customers who all expect an experience tailored specifically to their desires. Marketing platform makers recognized these issues and pivoted to create smarter algorithms designed to further assess potential customers on an individualized basis, using affinity networks and lookalike modeling to make more targeted predictions about activation. Making predictions about the future of platforms is a trickier proposition. Sometimes these broad pronouncements go well, other times less so.

Part of that middle ground we predicted here—such as the mainstreaming of virtual reality and debates about transparency, fraud, and ad blocking—have come true even faster than expected. Others, such as “social shopping” and marketers having to pay consumers for their data, have met resistance.⁵

In other words, it’s complicated. Some predictions come true while others fall flat. Signs seemed to suggest the imminent demise of banner ads a while back; they keep waving from the digital ramparts. We’ve heard about impending changes to Facebook’s algorithm that will

⁴ Levine, B. (2016, July 18). The evolution of marketing platforms: From automation to journeys. MarTech Today. Third Door Media.

⁵ Cardon, M. (2016, December 5). CMO.com's Top 10 Marketing Trends for 2017. CMO.com. Adobe Systems Incorporated.

render organic impressions a thing of the past, or radically increase them, depending on perspective and theory. Brick and mortar might be dying, but that hasn't stopped giants like Amazon from opening new bookstores and grocery stores in efforts to capture consumer interest and wallet share.⁶

Our predictions for the future of the marketing platform are grounded in economic factors, quantitative assessments of research produced by the world's leading research firms, and the convergence of sentiment from marketing thought leaders and practitioners. It's through the examination of the confluence of these three factors that we can develop our own assessment for not just why marketing platforms are in a state of evolution, but what they're poised to evolve into as well.

The convergence of these factors also suggests that marketers should pay attention to more granular aspects within those tiers to anticipate what opportunities will emerge next. For instance, as artificial intelligence (AI) continues to impact business, leaders must not only follow paradigms evolving within machine learning, such as deep learning and natural language processing, but must also anticipate their broad applications as they intersect with customer experiences. This anticipation creates a complex and exponential web of possible pairings and three-way combinations that will accelerate innovation even more.

None of the three effects we describe above is happening in a vacuum. Economic factors influence analysts that influence the decisions made by players in the industries they analyze. In a complicated vertical like digital marketing, we suspect this influence is even more pronounced than it might be in less complex or slower-evolving verticals.

This methodology results in four predictions that we believe will define the future of platform.

CUSTOMER EXPERIENCES MATTER MORE THAN EVER

Individualization is achieved when customer intention is anticipated, understood, and actioned in the moment. — Krisi Mansfield, CX Strategy & Transformation Director, Oracle APAC⁷

Customer experience is at the forefront of marketing. The rise of customer experience is changing the way that people buy. Consumers expect no less than exceptional experiences at any time. Customer journeys, while still important, are now experiences themselves, without a defined starting point, endpoint, or single entry point. The right experience at the right time can delight customers to the extent that they skip steps in the traditional funnel journey, shortening the buying process and deepening customer relationships. Within that context, your platform is only as powerful as the experiences it provides.

If the future of marketing is platform-based, those platforms will have to be able to solve for experiences

⁶ Donn, B. (2017, April 17). CMOs be prepared: The Connected customer is here. *Forbes India*. [Forbesindia.com](https://www.forbesindia.com).

⁶ Need reference

Customer Experience YoY Percentage Change



both positive and negative. They'll have to be able to score the right creative at the right time, but also be able to score the negative and know when to let an advertisement go, to understand when it's the wrong message at the wrong time, and when a potential customer has already purchased or changed their mind, even if they are a valuable audience.

We can see that analysts already know the power of customer experience by looking at the focus of their research. In 2015, research by eMarketer, Forrester, and Gartner that focused on customer experience in marketing constituted 58 percent, 38 percent, and 34 percent of total metatag hits respectively. In 2016, the number went up to 40 percent for Gartner, while the others stayed about the same. Yet, if you look back further than 2015, the rate of increase is more apparent, a trendline that is expected to continue.

In other words, customer experience will only continue to be paramount in marketing, with expectations staying high and even rising. Platforms will need the right functionality to be able to provide those experiences, but equally important will be the right quantity and quality of customer data.

DATA QUALITY OVER DATA QUANTITY

For a platform to master customer experience, it will need to harness and govern customer data appropriately. However, we're moving beyond the need to acquire data, aggregate data, or simply manage the storage of data. Data today with regard to platforms is about two things: volume plus velocity. Those things must work together. If you have high degrees of data volume happening at low degrees of processing velocity, or you have small degrees of volume at high degrees of velocity, you are missing out on opportunities. Either you don't have enough information or you're too late to use it.

This shift from quantity to quality of data and output plays out in analyst research as well. We can see from the year-over-year metatag dispersion that analyst research focusing on data governance is waning and being replaced with interest in data quality.

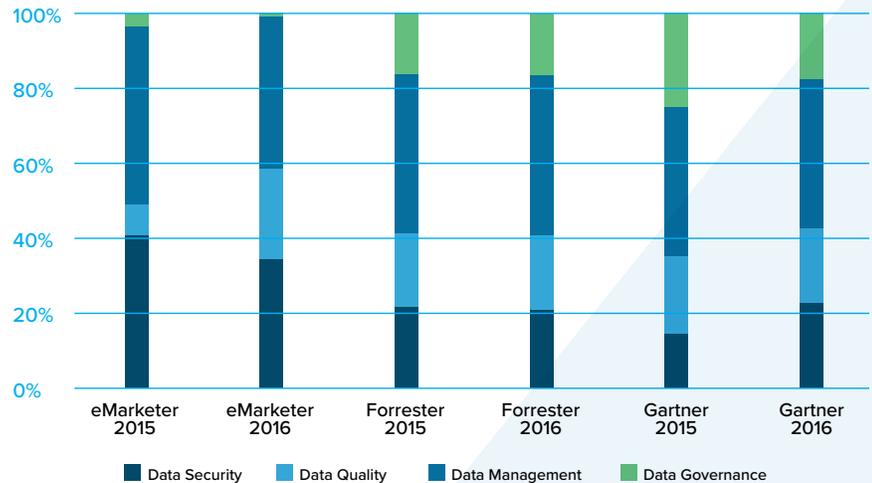
Coincidentally, this matches the eye test from conversations that are occurring within the marketing industry where "more organizations have come to rely on data-driven decision-making to drive their strategies. But even as this data-driven approach grows, many executives worry that the data they're using is not as accurate as it could be."⁸ Big data has gone from being a shiny new thing, where people were just hungry for whatever data they could get their hands on, to something over which marketers want nuanced control.

⁸ eMarketer. (2016, November 23). Data Quality Becomes a Top Concern for Marketers. Retrieved from eMarketer database.

Data Quality Is Iterative

This shift demonstrates the collective mindset of organizations aiming to move from being “data rich” to “insights rich.” Even if 90 percent of the world’s digital data has been created over the last 6–9 months and compounding, much of this data needs to be structured in a way that is meaningful to humans. After all, an insight is only as good as the context in which it is presented when combining data through varying layers of granularity. This process is recursive. In other words, information gets better over time as it self-corrects and converges sources of other data. It provides that very perspective it seeks to create from previously fragmented elements that lacked cohesion, structure, or a definitive pattern that makes something more than the mere sum of its constituent parts. Signal emerges from the noise, as volume, variety, and velocity provide the vectors for intelligence that can inform strategic decision-making.

YoY Data Metatag Dispersion



Marketing practitioners and statisticians are also echoing the sentiments of the analyst trends. Nate Silver, founder of FiveThirtyEight.com, lays out the problem with big data poignantly when he says, “We’re not that much smarter than we used to be, even though we have much more information—and that means the real skill now is learning how to pick out the useful information from all this noise,”⁹ and marketers are attempting to do exactly that as they begin to recognize the value of data not en masse, but in its functional application of providing better consumer experiences.

Data is becoming the currency of marketing, and marketers will now have access to more data than ever... [M]arketers will be able to use data to create more personalized and targeted products, messages, and customer engagements than ever before.
— Steve Fund, CMO, Intel¹⁰

9 Patel, S. (2017, April 8). How to Predict the Future Success of Possible Marketing Channels. Forbes. Forbes Media LLC.

10 Niazi, U. (2017, January 11). Top Growth Marketing Trends for 2017. Blueshift. Blueshift Labs, Inc.

THE RISE OF ARTIFICIAL INTELLIGENCE

As we witness this monumental shift in the way marketers are considering data, we're seeing it affect the evolution of platform. No longer do marketers have the luxury of isolating information between individual platforms. Funneling data to one platform on the left and another on the right is a thing of the past. Instead we're witnessing the need for not just integration, but a conjoining, where any number of platforms work together in harmony to combine data with high degrees of volume and velocity.

Researchers know, as do marketing practitioners, that if they don't nail that combination of volume and velocity, then their platform will be left behind. Hence the renewed emphasis on understanding first-party versus third-party data and the tools used to translate customer data into the vernacular of platform databases. Most companies have no problem coming up with the volume of data—the rise of the smartphone has resulted in a massive influx of data, which will be matched and then some in the next few years by the rise of the Internet of Things. The velocity with which to process and pick out the most resonant, relevant bits of information is something that platforms will need to provide.

The key in 2017 will be transforming and analyzing data in order to derive contextual conclusions about our customers. —Karen Walker, Senior VP and CMO, Cisco¹¹

So what's next for AI? Here's a pretty big hint: intelligent insights... AI that works on behalf of marketers to elevate information that supports better decision-making. — Leah Pope, CMO, Datorama¹²

Driven by the need to manage experience, marketers are correcting their data for quality and amassing it in volume. But now, with the corrections in place, they must make sense of it. They need the velocity of processing power. With all these platforms coming online, there's simply not enough bandwidth to accomplish needed organization through human to human connection, nor is it enough to use intuition alone. In our complex technological environment, once you have the data quality problems worked out, AI is the only solution capable of rounding out the volume and velocity combination.

The potential of AI is still yet to be realized, but it's interesting to point out the integration into our lives we're already witnessing; recommendation engines, autonomous cars, digital assistants, sentiment analysis, chatbots, and numerous other technologies are all made possible through the power of AI.

But success won't come in the form of AI that we already have in place. The future of platforms will rely on AI connecting to other AI. AIs working together will solve problems they've been uniquely developed for. Just as there are multiple forms of human intelligence,

¹¹ Niazi, U. (2017, January 11). Top Growth Marketing Trends for 2017. Blueshift. Blueshift Labs, Inc.

¹² Pope, L. (2017, March 9). 2017 CMO Focus: What's Next from AI? Intelligent Insights. MarTech Advisor.

there will be multiple forms of artificial marketing intelligence. Intelligences that can tell us whether or not a particular creative ad is likely to elicit a positive response. Intelligences that tell us whether this is the right moment in which to show a particular creative ad. Intelligences that show us whether or not the context in which the ads will be shown is right for a particular consumer. Although these outputs seem like they are already driving efficiencies for many brands, this is just the beginning.

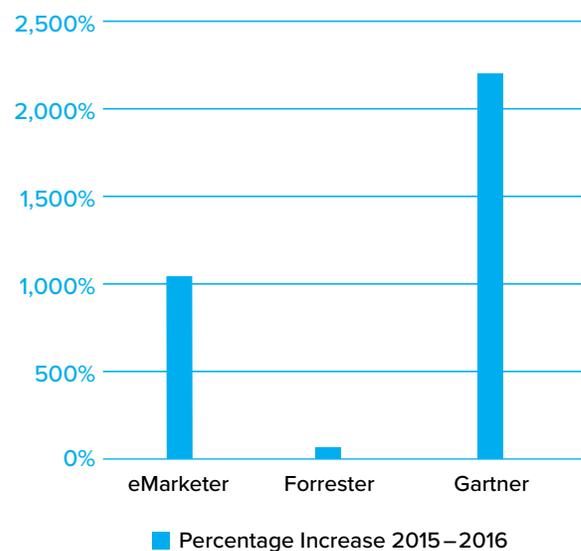
AI can power a deep understanding of customer behavior and can provide decisions on what time, which channel, and which message variant to use for interaction. Leveraging AI tools to process data more efficiently and uncover new insights faster provides a significant competitive advantage. —Frank Palermo, Head of the Global Technical Solutions Group, VirtusaPolaris¹³

The platform of the future must be able to influence, and export, AI-to-AI data. Marketers will be looking for more industry partnerships—partnerships that will likely lead to the consolidation of platforms that are capable of forming the meaningful unions and integrations that will allow AI to make good on the promise of positive digital experiences in the first place.

¹³ Greengard, S. (2017, April 20). Real NEws Alert! Artificial Intelligence Is Redefining Marketing. CMO.com. Adobe Systems Incorporated.

Analysts are also starting to recognize the potential of AI, represented by a dramatic increase of research focused on the subject. Analysts from eMarketer went from writing 3 reports on AI in 2015 to 20 in 2016, a 566.67 percent increase; analysts from Forrester went from writing 26 reports in 2015 to 60 in 2016, representing a 170 percent increase; and analysts from Gartner went from writing 0 reports in 2015 to 9 in 2016.

Number of AI Reports



Likewise, the promise of AI is being talked about differently by analysts as conversations change year over year. Late in 2015 we saw analysts from eMarketer say, “Digital marketing has long promised greater effectiveness and efficiency thanks to data, and a host of tools and techniques have been added to the marketing stack to that end. Predictive

marketing—a method of extracting information from customer datasets to detect a pattern and, ultimately, predict future outcomes and trends—is quickly becoming important among business-to-business (B2B) marketers.”¹⁴

In 2016 the conversation became more about how AI makes negative marketing outcomes less likely, while simultaneously handling the big data overload¹⁵ and sifting out the quality data from the stack. The growing maturity in the way that analysts discuss AI matches the growing maturity of the technology itself. And as AI matures and begins to process and optimize our information, it paves the way for other more advanced technologies that will transform marketing further.

Deep Learning, Deeper Engagement

Deep learning—a subfield of machine learning that, at a high-level of abstraction, models how a neuron in the brain would fire given a certain threshold when it is met through a weighted sum of inputs from other neurons—enables a wide array of applications from speech and text recognition, medical diagnosis, digital marketing, recommendation engines, stock market prediction, autonomous cars, and much more.

Deep learning allows a framework that loosely resembles how we interpret the world through our senses, how that information is rendered through hierarchical pattern recognition, and allows us to create models about the past, predict the future, and make decisions in the present.

This technology adds interesting new dimensions to evaluating how machines solve problems we can't, but it also sets the stage for more fundamental discussions around the nature of customer engagement—perceiving, thinking, and behaving in an exponentially oversaturated world of digital information. As more granular attributes in the digital world can be measured, so will more granular variants within the brain—down to interneuronal connections and synaptic patterns. We won't just be able to measure how engaged someone is with a brand based on an outcome or behavioral trigger. We'll be able to see patterns in the brain that detect subconscious elements that result in those behaviors. The key will be in converging nascent electroencephalography (EEG) technologies with virtual reality interfaces.

¹⁴ eMarketer. (2015, October 29). Predictive Marketing Will Be Key Piece of Technology Stack. Retrieved from eMarketer database.

¹⁵ eMarketer. (2016, October). Artificial Intelligence 2016. What's Now, What's New and What's Next. Retrieved from eMarketer database.



AUGMENTED REALITY, VIRTUAL REALITY, AND THE HYPE CYCLE

The future of mobile is tilting increasingly toward wearables, especially as augmented reality and virtual reality solutions hit the market. Long the objects of sci-fi fascination, the looming potential of AR and VR technologies lies in the enterprise with capabilities that could potentially reshape business processes, or fundamentally recast customer experiences. While the consumer world waits for the dominant AR and VR players to emerge, the enterprise can fast-track adoption—and begin the process of fundamentally reimagining how work gets done.¹⁶

All of this happens within a context: what are the channels or what media can we use? Your grandfather's banner ad is your father's display ad. Your father's display ad is today's video or native ad. The next generation might be augmented reality (AR) or virtual reality (VR); there will always be a proliferation of channels.

New technologies tend to follow a hype cycle, which represents inflated expectations during “the maturity and adoption of technologies and applications, and how they are potentially relevant to solving real business problems and exploiting new opportunities.”¹⁷ These _____ is the new black expectations often lead to disappointment, “when new technologies make bold promises.”¹⁸ It's possible, for example, that we're already seeing this with native advertising, where it hasn't necessarily lived up to its potential, or it becomes so common that it's no longer special. We see analysts turning to things like AR and VR and their potential, their promise, their hype cycle.

17 Gartner. (n.d.). Gartner Hype Cycle. Gartner Research Methodologies. Gartner, Inc.

18 Gartner. (n.d.). Gartner Hype Cycle. Gartner Research Methodologies. Gartner, Inc.

16 Kunkel, N., Soechtig, S., Miniman, J., and Stauch, C. (2016, February 24). Augmented and virtual reality go to work. Deloitte University Press.

Look at the trend lines. Admittedly “virtual reality has a ways to go before the intersection of retail and technology fully merges,”¹⁹ but, much like the evolution of the smartphone as a piece of marketing technology and the analogous example of the internet that came before that, the potential of AR and VR is only limited by its consumer adoption rate.

There are other competing hype cycles—the Internet of Things or wearables, for example. We can’t be sure which technology will reach maturity first. The important thing is that the platforms of the future can’t be built in response to these channels, they must be built to work across all of them from the very beginning. If you’re waiting to integrate until after a channel has already proved its viability, you’re too late.

¹⁹ eMarketer. (2015, December 3). Virtual Reality Interest Highest Among Gen Z. Retrieved from eMarketer database.

The Convergence of AI and VR

AI-to-AI technologies require a unified infrastructure on the back end, but also a seamless interface for customers on the front end. Based on the accelerating trends taking place in both fields, often overlapping to create new innovations, the AI/VR innovation convergence will be another facet that may change the very definition of platforms altogether.

EEG headsets sense the electrical activity inside a person’s brain using a technique known as electroencephalography. The technique works like this: electrodes are placed on the surface of someone’s head; these electrodes can measure the electrical signals produced by the brain’s neurons through the scalp. EEG has been used as a diagnostic tool for more than half a century. Neurologists can identify patterns in a patient’s brain wave activity, allowing them to spot abnormalities that could give rise to seizures or other neurological disorders.

The technology of EEG headsets is currently still in its infancy, but as soon as it matures, these headsets can be combined with AI-powered virtual reality experiences that will enable scientists to explore, with a high degree of granularity, what goes on in the brain when a person is subjected to specific experiences. We can measure how audiences react to scenes in movies; why they like specific colors, sounds, word combinations, the types of actors in a scene; why they have a stronger affinity for one brand over another. As these new datasets emerge from EEG platforms, VR experiences will provide new triggers that will allow scientists to unlock the very nature of how knowledge and experiences are constructed in the brain.

CONCLUSION

David Cohen, president of Magna North America, recently suggested that the choice marketers face is obvious: between the old and the new, between the outdated and the future:

We are between two worlds of legacy thinking and the new reality. Those two worlds don't mesh. —David Cohen, President, Magna North America²⁰

Platforms will not remain merely vehicles for expediting marketing campaigns, but will become increasingly fundamental for understanding one's audience, the full funnel journey of consumers and buyers, the optimization of creative, the deployment of marketing assets across channels—often with machine learning executing and managing the media mix, integrating channels like VR and television and programmatic radio, combining multiple artificial intelligences and decision engines to do things at a scale and a velocity unimaginable just a handful of years ago.

For any of this to happen, the platforms of the future must enable it, and the platforms that will survive martech consolidation and that power the next generation of marketing will be those that enhance consumer experiences, improve or facilitate data governance and first-party data integration, enable AI-to-AI communication, and prepare for the channels of the future, even as they integrate them with the more established channels of the past.

²⁰ (Cardon, 2016)