



INTRODUCTION

When AT&T bought the first banner ad on Hotwired.com in October 1994, no one could have realised that they were witnessing the birth of an industry. This year, that industry will support sales of digital advertising worth over USD\$223 billion.

The advertising technology industry is a huge, complex and sprawling ecosystem. It incorporates everything from third-party ad networks to trading desks, real-time bidding platforms, retargeting, supply- and demand-side platforms, sophisticated attribution models and—increasingly—artificial intelligence solutions.

Between those humble beginnings and today, something else happened—or, rather, didn't. Marketing changed, but marketers didn't. Even as the largest part of their budgets—campaign spending—began to automate, marketing managers largely forfeited responsibility for this emerging technology to their agency partners.

BOILING THE FROG

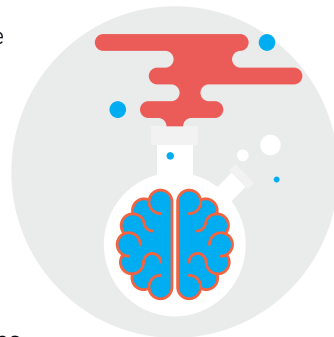
In one sense, the decision was logical. Skills were scarce and agencies were more likely to be able to leverage their investment across multiple clients. And, at least initially, the proportion of money going into digital relative to other channels was tiny.

This happened with e-commerce—IT teams often built the first systems.

Marketers tended to remain focused on traditional campaigns or on direct one-to-one marketing activities, like direct mail, which quickly morphed into email. Marketing tech initially also remained focused on developing direct customer relationships.

Over the next two and a half decades, advertising and marketing technology—with little more than bare acknowledgement of one another—developed in parallel.

However, times are changing. Companies are making huge bets on the mergers and acquisitions front and on the emergence of competing models. In one camp, companies like Marketo and AdRoll are betting that the future looks like a vibrant, disparate ecosystem that plugs together at an API level. In the other camp are marketing-cloud businesses like Adobe and Oracle, which want to pack as much capability as possible into a single branded suite.



In the thick of all this are brands and agencies. For the short term, they'll need to leverage superior data to proactively respond to every customer's buying signals. In the long term, they'll need to build engaging, compelling experiences to ingratiate themselves with customers.

FOLLOW THE MONEY

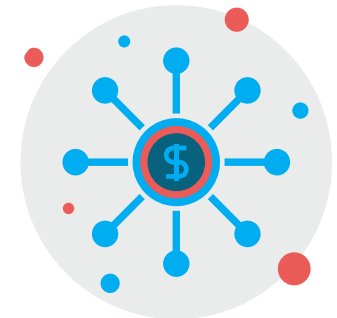
For the first time, digital marketing budget—40% of the total global advertising—will surpass television advertising. Markets like the UK already enjoy this digital majority.

Even further, marketers are investing in technology more than in advertising altogether. This fact was not lost on Scott Brinker of chiefmartec.com. This year, Scott released his latest map of the marketing technology ecosystem. Marketers, he noted, are moving into a world that prioritises technology over campaigns. Data is at the heart of this change.

The data layer is where the merger of the complementary worlds of ad tech and martech are most pronounced. This is apparent with the investment marketing-cloud vendors have made in technology acquisitions—such as data-management platforms—and in the new capabilities more ad platforms, like AdRoll, are providing through services such as AdRoll Email. The convergence of these two worlds brings with it huge implications for brands and their agency partners.

We interviewed some of the global tech sector's leading CEOs and CMOs and leaders from the Australian advertising and marketing technology worlds to learn why the market developed as it did, why it is coming together now and what the implications are for the broader marketing ecosystem.

We kicked things off with a very simple question: what exactly are ad tech and martech? If only the answer were simple.





WHAT'S THE DIFFERENCE?

One of the difficulties in describing the worlds of advertising technology (ad tech) and marketing technology (martech)—and their current convergence—is that there is no universally accepted definition for either.

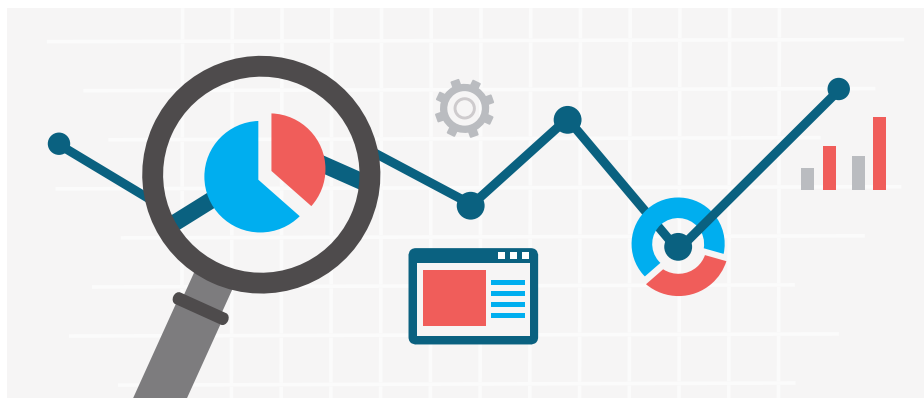
Many have argued that there was never really a time when they weren't converging at some level. All this fluidity and rapid change also meant that clear distinctions were never established to begin with—at least not with any firm footing.

To make matters more confusing, you can be sure there are exceptions to whatever definition you come across.

Some have tried to differentiate between the two. One interpretation is that ad tech tends to work with pseudo anonymous, cookie-based identifiers, whereas martech typically deals in first-party collected personally identifiable information (PII).

But one can dispute even this iteration—especially since the start of web-based email and social media platforms. Arguably, the world's two biggest ad tech players—Google and Facebook—are walled gardens that have some of the world's largest pools of PII.

Or you can view it from another perspective by examining three of the bigger martech platform providers: Adobe, Oracle and Salesforce. All three have invested in data management platforms (DMPs) in recent years. Adobe was first with DemDex in 2011. Then three years later, Oracle acquired BlueKai—which, to add to the confusion, does not even sit within Oracle's marketing cloud. Finally, last year Salesforce purchased Krux—having previously claimed it didn't need a DMP at all.



In each case, the goal was to enable the platforms to integrate more directly with cookie-based advertising solutions. As a result, the companies have pushed more aggressively into the ad tech world.

Yet another way to differentiate between ad tech and martech is to assume that martech is more focused on brand messaging or email, whereas ad tech is more performance based. But AdRoll Email, AdRoll's entry into the email market, disputes that positioning. AdRoll Email looks like a classic marketing-technology solution, except that it offers performance-based disciplines.

With the help of Australian and US industry leaders—AdRoll founder Adam Berke, Marketo CEO Steve Lucas and Foundation Capital's Ashu Garg—we compiled five common distinctions between these technology types:

1. Ad tech solutions use performance-based models, whereas martech solutions use annuity-based pricing models.
2. Ad tech solutions use cookie-based identification, whereas martech solutions use PII.
3. Ad tech platforms primarily operate in a one-to-many environment, whereas martech platforms operate in a one-to-one environment.
4. Agencies and partners are a part of the ad tech orbit, whereas in the martech world, brands work directly with vendors.
5. One of the real but less-discussed organising principles behind the distinction is the need for financial markets to understand how to price the stock. As the pricing models are different, the way the markets value the two disciplines is different.

And here's something that no one wants to mention too loudly: it is often easier to get ad tech approved over martech. Ad tech can fly under the radar as part of a recurring campaign budget. On the other hand, martech can come across as IT spending—the threshold tests for internal approval are higher and often require a dedicated head count.

For example, Marketo cofounder and former CEO Phil Fernandez identified the difficulty of valuing a business with blended models as an important factor that kept him from buying directly into ad tech when he ran the company.

The distinctions between both worlds are useful for understanding their limitations and the potential impediments that could frustrate a more accelerated merger between ad tech and martech.



WHAT ARE THE ROADBLOCKS TO A MERGER?

The writing's on the wall—these two worlds are merging. The pros far outweigh the cons, but there still are some significant roadblocks ahead.

In a column provocatively entitled “Why Martech and Ad Tech May Not Converge,” Gartner’s Martin Kihn outlines some of the problems, including:

1. **The Customer** In ad tech, there are few global players with the budgets to leverage the market. In martech, every company with an email list or a website is a customer. Gartner estimates that the top 100 advertisers account for 30% of total spend, whereas the top 100 buyers of martech represent less than 3%.
2. **Decision Making** The CMO and their agencies control the budget, but responsibility for software licences or cloud services is split between IT and marketing. The CMO may spend more on IT than the IT manager, but without IT’s buy-in, success is compromised.
3. **Different Data** In martech, accuracy is everything. In ad tech, recency trumps accuracy—like the one-to-one vs. one-to-many distinction.
4. **Talent** In Kihn’s words, “Ad tech is a big-city, latte-sipping, coastal-elite, hipster-hugging multiverse. It exists in NYC, SF, LA, Chicago and...? Martech can be anywhere; it’s not owned by agency hipsters and it is quite at home in Indianapolis or Battle Creek. Different types of people work in these milieux.”
5. **Pricing** Marketing is subscription based, whereas ad tech relies on CPM or CPA.

Actually, most of the big martechs can't align their own internal pricing models today as their clouds are largely amalgams of acquired assets.

6. **Uncertainty** As anyone who ever used Groupon understands, consumers are rapaciously and comically disloyal—or, as Kihn puts it, “genetically crazy.” As a result, ad tech is far more vulnerable to their mood swings. “Look at the rise of ad blockers as an example,” says Kihn. Then there are issues of fraud and brand safety. Inside their own systems, the marketer is king. But on the open savannah of trading desks and real-time bidding, fraud and menace are ever present.

A recent study of 700 mobile ad networks found that more than 30 had fraud rates about 50% and five networks were 100% fraudulent.

7. **Competition** Kihn says that the competitive landscape for martech is pretty staid, especially at the enterprise level. In ad tech, there are thousands of companies—from global behemoths like Google and Facebook to whatever new apps are in the App Store®.

Kihn’s seven points are all worth considering, even if none of them are entirely disqualifying. These points won’t overwhelm marketers’ desire to achieve a universal view of all their marketing activity.

That said, how disconnected are ad tech and martech and why is it happening now?





HOW DISCONNECTED ARE THEY AND WHY IS IT CHANGING NOW?

To understand why there has been such a strong push for ad tech and martech to merge, it is important to understand these markets in a broader context.

The growth and increasing scale of both disciplines actually reflect a wider and more significant trend: the global emergence of e-commerce.

This year, eMarketer forecasts the world's e-commerce spend will reach almost USD\$2 trillion. That dwarfs the total digital advertising spend of USD\$223 billion this year. It is important to remember how those figures are linked.

E-commerce removes much of the friction in the purchasing process that has existed in the past. Digital advertising directly connects buyers and sellers online, in a manner that was simply never possible before.

Spending on martech—which is more opaque—is benefiting from the removal of friction by e-commerce too. Indeed, the latest figures from chiefmartec.com are telling.

Last month (May 2017), chiefmartec.com's Scott Brinker revealed a telling statistic. And, no, it's not that there are over 5,000 companies in the ecosystem.

A full third of marketing budgets are now channeled into technology, and 28% of that third is spent on infrastructure.¹

The key point, as Brinker explains, is that "marketing technology budgets are now surpassing advertising."

That's a huge shift, and it has happened in a relatively short period. It is not as if total budgets have increased dramatically to fund the extra infrastructure. Instead, marketers are reallocating their money.

They still need to grow sales though. This suggests that they believe they can make their advertising spend more efficient through the use of technology. Therein lies the very core of the move to merge. That efficiency involves connecting all the touchpoints they have with customers and prospects.

This shift in resourcing is not without risk.

As Clement Tsang, Cadreon's head of consulting, explained in the recent Which-50/ADMA roundtable examining ad tech and martech, "A recent consultancy found that 44% of organisational leaders do not know who their customer is."

According to Tsang, "Those disruptive businesses who know the customer, who don't have legacy systems, and legacy sales forces, are leapfrogging what I would call the CIO IT hierarchy of things."

The problem for incumbent businesses is that siloed information recurs in just about every major study of digital marketing technology. Those silos exist within companies, between partner organisations and even within customer databases due to regulatory restrictions. And, say industry leaders, it's unlikely that they will ever be fully resolved.

Instead, incumbent businesses have argued that a better approach is to acknowledge that perfection is likely impossible for the simple reason that the owners of the biggest data sets have little incentive to cooperate.

As AdRoll's Adam Berke describes it, "Facebook isn't all of a sudden going to play nice with Google. And Google isn't going to all of a sudden share search engine result data openly with everyone else."

Even within platforms there are problems.

The leading marketing clouds today are often amalgams of acquisitions. Instead of a single, unified platform, they offer an à la carte menu that partly reflects the pricing differences but also reflects a disparate product mix.

Critics say that often data is not really consolidated but is instead replicated multiple times within a marketing cloud. This builds inefficiency at a technical level and impacts performance.

Buyers understand this. One of the effects is that they are more likely to opt for best-of-breed solutions, rather than a single suite, since they know they will have to deal with disconnectivity whichever route they choose.



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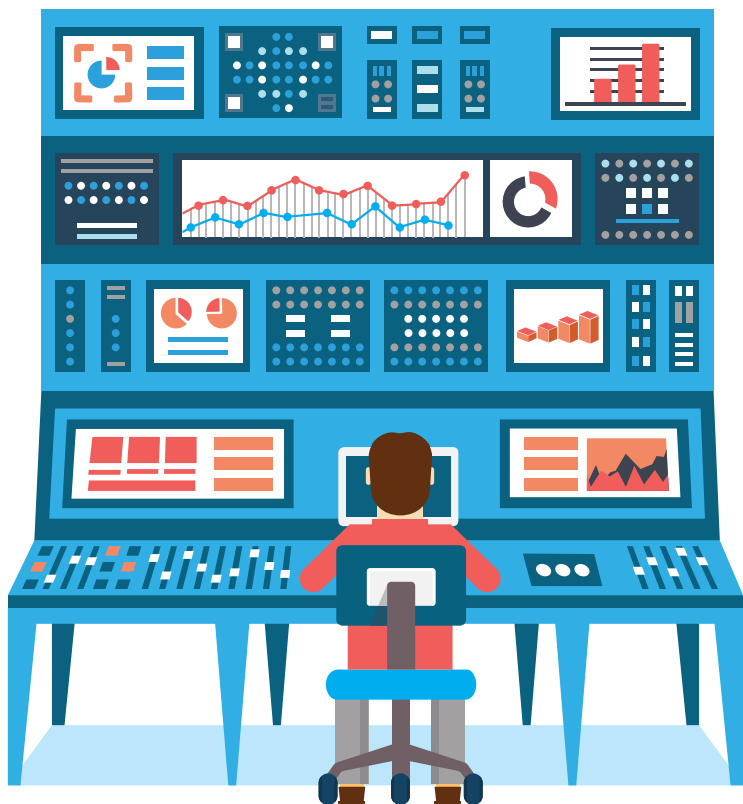
1. The data is sourced from Gartner's 2015/16 CMO Spend Report.



In larger enterprises, the problem is exacerbated by the fact that they need to tie other complex systems together—such as CRM, ERP and point of sales—to genuinely create a single view of the customer.

Even if they solve this problem, connecting to the systems of partner organisations, like agencies, provides another headache. An agency will not have designed its ad tech stack with the corporate data strategy in mind. There may be complex rules around governance and data use, and much of the cookie-based information held by the agencies in their systems will be hard to pin back to an individual customer in a company's own database.

Little wonder, then, that marketers want to find a solution to all this dislocation.



DATA, DATA EVERYWHERE

Access to the best data sets, and the ability to marry this data together and have it available at the very moment a consumer sends an engagement signal, becomes a core competitive advantage.

This imperative is a big part of the drive to merge the disparate worlds of ad tech and martech. All of those big-ticket investments in marketing technology can only ever pay off if a brand can get its data story straight.

Two additional factors drive ad tech and martech together.

The first is that the big global software businesses—the ones developing marketing clouds inhouse—are now acquiring ad tech companies as a way of fueling innovation. For large global companies, innovating from within is difficult. Smart acquisitions can strengthen their overall position and help them diversify into new markets.

The second is a wider strategic shift in the market. In the past, media companies that provided the distribution channel, environment and audience captured a disproportionate amount of value. The platforms, by comparison, captured very little. Now, platforms and publishers are merging inside services like Facebook and YouTube.

These combined entities are capturing a large part of the value associated with the advertising. With access to huge reservoirs of first-party data, they are well placed to help marketers figure out what ads to show and who to show them to.

To remain competitive, more traditional publishers need to be able to offer a comparable stack by working with independent advertising technology platform providers.

To win in the advertising game these days, publishers need to operate either at global scale or in specialized markets.

National publishers find themselves stuck between these two worlds. With few exceptions—such as AOL and News Corp—most publishers lack the technology resources or expertise to compete with a Google or a Facebook. Instead, their best bet is to partner with independent platform providers to rent capabilities and, ultimately, to share data with peer organisations in other jurisdictions—via either public or private data exchanges.





WHY BRANDS BENEFIT FROM THE MERGER

Today's marketers find themselves in a very different world than their predecessors'. Accountability and transparency have never been higher. Their performance is measured more on financial metrics than campaign performance, and the channels they need to understand are more varied and disparate.

Research by marketing automation company Aprimo suggests that the average CMO in Australia needs to account for 25 different channels in order to maintain a genuinely holistic view of the customer.

Consumers are more fluid and better armed than ever before. Smart mobility puts a world of comparative information at their fingertips every moment of the day. These consumers are also more demanding, taking their best customer experiences in any context and applying those as the threshold test to every context.

To meet these growing challenges, brands need a fully unified data story that gives them as clear a picture of their current customer relationships as they can deliver.

Smarter marketers know that they will never really achieve an absolute view of the customer. Regulations, competitive tensions between walled gardens and simple scale will make that impossible to achieve. Still, one of the driving forces behind the merger of ad tech and martech is the need by brands to get as close to an approximation of this unattainable goal as possible—along with the desire of platform providers to help them do it.



ATTRIBUTION

Take the question of attribution. The prevalence of first- and last-click models suggests that many digital marketers still operate in a world in which the lines between the data in their advertising platforms and their marketing platforms is impenetrable. It is like those two worlds are unaware of each other.

These unsophisticated models assume that a single marketing tactic—a display ad for a search query—is the only thing that informs a customer's purchasing choice.

Various studies in the past year suggest that attitudes are changing. Increasingly, multi-touch models are being developed.

That said, "multi-touch" is a very loose term. As Foundation Capital's Ashu Garg explains, it is necessary but not sufficient:

"You not only have to be multi-touch; you have to take into account offline activity. You have to take into account the lag factor because the sales cycle and purchase cycle for many products are relatively long. How far backwards do you look? So, sophisticated attribution is a very, very hard technical problem."

In fact, Garg says a big part of the problem is that many brands are simply not as performance focused as they care to admit.

According to Garg, "90% of brands that say they are performance oriented are actually not performance oriented. I think it's a continuum—as people get more sophisticated about their advertising, they're going to get more performance oriented. As they get more performance oriented, they'll want third-party attribution."

AdRoll's Adam Berke adds another axis to the discussion. "If you put yourselves in the shoes of the marketer, they're increasing their spend year over year in these various channels at a rate that doesn't necessarily correlate to the rate of their business growth. At some point you have to ask, 'Okay, what's the causation here? You know, I'm spending 30% or 40% more each year on Facebook, but my business is only growing 10%. What's going on here?'"

"In fact, you could say that about search or retargeting or anything that has seen a lot of growth over the last few years."

In both cases, to understand fully which activity is delivering the best outcome, marketers need to be able to trace a line between all of their activities—across paid, earned and owned media—and to make some determination about the impact.

Of course, attribution is only one benefit.



Marketing leaders we spoke to on both the buy and sell sides offered a laundry list of advantages.

- 1. Building value** A better understanding of how customers engage with a brand will enable marketers to improve on the customer experience, increasing engagement and lifetime value.
- 2. Higher sales, better prices** The goal of marketing is neither to increase click-through rates nor to drive down cost of acquisition. It is to move more merchandise at the best possible price. Tighter integration across all marketing activities will make it easier to deliver the right offer to the right customer at the right moment.
- 3. More control** Marketers feel they have ceded too much control over their advertising technology to their agency partners. Initially, it made sense—digital did not always represent the huge slab of total spend that it does today, and skills were scarce. Furthermore, agencies had the kinds of direct relationships with publishers that the brands could leverage without having to invest their time. Now, the need to understand what customers want means that brands require more control over their data and how it is used. In a merged world, taking back control of attribution modeling will make agencies more accountable. Linking advertising campaigns to personally identifiable data through a proprietary database using sophisticated probabilistic matching will increase campaign efficiency.
- 4. Knowing for sure** Marketers are able to base personalisation on a deterministic knowledge of the identity of the consumer. Because they can know with complete certainty from their CRM software or e-commerce engine the identity of the customer, they can personalise not only the message but also the product and service offering.

Industry leaders say that the merger of ad tech and martech represents a restoration of the value exchange between brands and customers. Put another way, it is direct marketing with mass-media scale.

AGENCIES

One final issue that is worth considering is how the merger of these two technology streams impacts one of the most important relationships a marketer has today: that with its advertising agency.

Already, the last twelve months have seen moves by big brands to shift programmatic buying and attribution in-house. Often marketers initially justify these moves on the basis of cost savings, but they say the real value is the understanding they gain about their customers from direct engagement with the process and with the data.

Agencies do not always get culled completely. In fact, many brands value and require the expertise that agencies provide.

However, the relationships are clearly changing. Garg, for instance, takes a position at the more extreme end of the debate. “If you use an agency, you’re not a true performance marketer. People who really care about performance marketing consider it a core competency. Would you outsource your CEO? No.”

Others take a more nuanced view.

Agencies need to adjust to a world in which brands insist that the data associated with a company needs to belong to the company and needs to be available so it can be seamlessly integrated into other company systems. As the worlds of augmented reality and artificial intelligence are brought to bear on marketing functions, this requirement is likely to increase.

This shift in responsibility from agency to brand has been underway for some time, although clearly some agencies have embraced it and some have resisted.

It is also clear that agencies have a huge repository of skills and knowledge that will be key to the success of brands in a world of merged ad tech and martech. That suggests the relationships may change.





CONCLUSION

Marketing is undergoing dramatic changes. Technology is recasting the nature of the role and the kinds of people who will succeed in the profession.

Today, data sits at the nexus of the twin disciplines of advertising technology and marketing technology. The data layer is where these two complementary yet strangely disparate worlds collide.

Our deep dive into the merging worlds of ad tech and martech produced some key takeaways :

1. There is no single absolute definition that distinguishes one from the other. Instead, the disciplines of ad tech and martech most commonly differ over the types of data they rely on, the types of campaign activity they support, who—brands or agencies—typically manages the systems, the way services are priced and whether the media is paid for or owned.
2. While there is clearly a convergence underway, significant roadblocks remain. Customer sets are different, as are the decision makers. Likewise, the types of companies involved vary, as does the level of uncertainty around the impact of changing consumer behaviours.
3. Silos remain a major problem. Silos exist between and within the two disciplines as well as across the wider enterprise and beyond its borders. Where the worlds do intersect, the data layer is critical.
4. A number of factors are creating the circumstances for an accelerated push to merge. These include a desire by martech platform vendors to provide a consolidated view of all marketing activity to brands and the importance of identification in creating market-leading customer experiences.

5. The benefits to brands from the merger are significant. For starters, marketers will be able to have a more transparent view of the results of their investments. Attribution modeling should be easier, and by taking more direct control of all the data the company needs, marketers should be more able to control costs while providing much better service to customers and prospects.
6. The merger of these two worlds will fundamentally change the nature of the relationship between brands and agencies.

Marketers will spend USD\$500 billion on advertising during 2017. At the same time, marketers will spend more on their technology than ever before. Technology is now core to the success of all marketing, and technology that provides a holistic view of all the activities marketers undertake—regardless of whether media is owned, earned or paid for—represents a core competitive advantage.





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