



POST DIGITAL MARKETING

The new technology stack is transforming old digital marketing functions.

White paper by Tom Chanter

FOREWORD

Is your business ready for the new era?

As digital marketing tools have become ubiquitous, they no longer provide a competitive advantage. What specific technologies are changing the landscape? How can we stay ahead of our competitors? How long until these innovations become industry standards?

We need a broad vision of the innovations shaping our future. To find out, we analysed research from McKinsey, BCG, Bain, Deloitte, Cognizant, and Accenture.

We need to understand the mechanisms that underpin these technologies. We studied the specifics; whitepapers on the Internet of Things, Distributed Ledger Technology, Quantum Computing, Artificial Intelligence, and Extended Reality.

We need a blueprint to implement these innovations. To see how they could be applied in the real world; we read case studies and annual reports on 1QBit, BMW, Bosch Rexroth, Facebook, Golem, Huawei, LinkedIn, Microsoft, Paper Boat, Rigetti Computing, Symphony Post-Acute Network, TikTok, Uber, Volkswagen, and WeChat.

What insights emerged?

First, we'll explore how digital transformed marketing over the past decade. Second, we'll examine the new technology set to transform different industries. Finally, we'll explain how these new technologies will shape the post digital marketing world.

Here's why it's exciting: The post digital marketing world will underpin this decades' economic growth — with successful innovators set to reap enormous profits.

Imagine that in 2010 you had predicted the impact digital marketing tools would have on business and acted on your insights. How much stronger would your business be today? In 2020, these new technologies give us another chance to get ahead of the competition.

However, like digital marketing, these new technologies will soon become standards. If companies don't start implementing them right now — they will miss the opportunity to capitalise on these technologies.

As you read this report on how marketing will change over the coming decade, think ahead and decide how your organisation can implement and capitalize on these new technologies.

Best of luck,



Tom Chanter

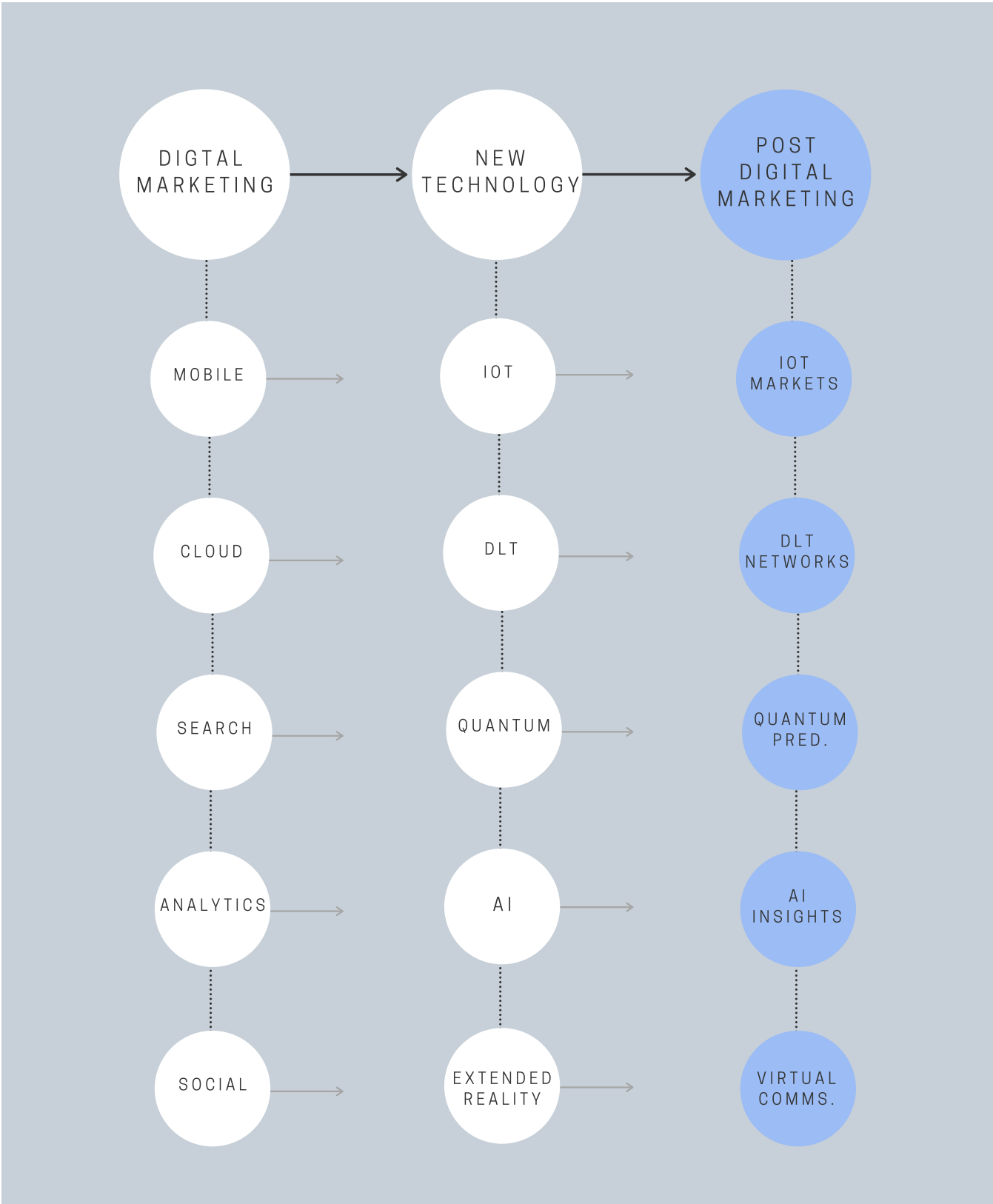
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**"Go as far as you can
see; when you get
there you'll be able
to see farther."
- J. P. Morgan**

OVERVIEW

A path to Post Digital Marketing.



Section 1.

DIGITAL MARKETING IS NO LONGER A COMPETITIVE ADVANTAGE



Digital marketing has driven the greatest changes in marketing since radio and television.

Digital marketing has helped businesses understand their customers better, communicate with them seamlessly, and analyse their data. They gave early adopters a huge competitive advantage.

Today, mobile, cloud, search, analytics, and social are the foundations of every marketing department.

1. Mobile

- Access information anytime and anywhere
- Internet access developing nations
- Communicate 24/7

2. Cloud

- On-demand computing power
- Scale infrastructure at low cost
- Store more data

3. Search

- Niche audiences
- Targeted advertising
- Content marketing

4. Analytics

- Data-driven decisions
- Optimized everything
- Increased efficiency and reduced costs

5. Social

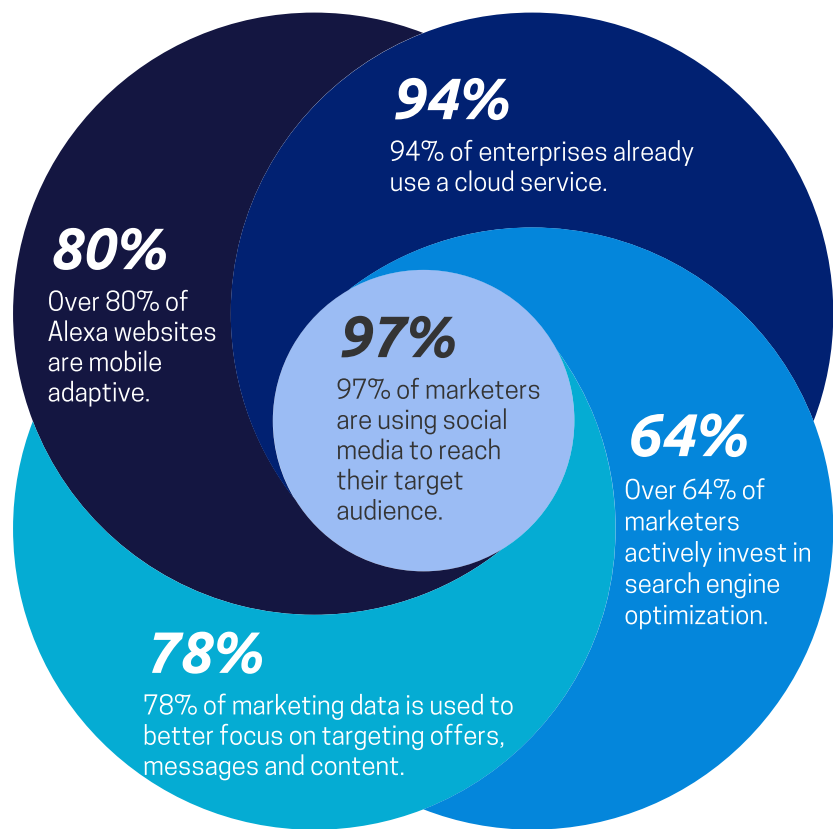
- Foster digital communities
- Viral growth through social word-of-mouth
- Earn social proof with reviews

These technologies changed how the economy and society function. And yet digital marketing is no longer a competitive advantage.

Digital marketing is ubiquitous

Digital marketing no longer differentiates a company or provides an edge. What was a competitive advantage in 2010—is an industry standard in 2020.

Digital tools are ubiquitous. Are they obsolete? Almost. However, digital platforms will be the base from which companies can launch their new technology stack—differentiating them from the competition.



What's the bottom line? To earn a competitive advantage from 2020-2030, organisations must leverage the new generation of technologies that are set to underpin their next decade of growth.

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Section 2.

THE NEW TECHNOLOGY STACK UNDERLYING THE NEXT DECADE OF GROWTH



There is a new stack of technologies ready to transform our markets.



From 2010-2020 the new tech stack has been developed and tested. From 2020-2030 it will become established—and underpin the decades' economic growth.

If you're planning to leverage the new tech stack to earn a competitive advantage, it's critical to understand and implement them now—before they become the norm. Which specific new technologies will have the greatest impact on our economy, businesses, and marketing functions over the coming decade?

You've seen them emerge, they're now set to dominate. They're the Internet of Things, Distributed Ledger Technology, Quantum Computing, Artificial Intelligence, and Extended Reality.

1. Internet of Things (IoT)

By the end of 2020, there will be 31 billion devices (or 'things') in the world connected to the internet. By the end of 2025, there will be 75 billion. This is the platform IoT is building off—each new device is a new source of data.

Fundamental to the IoT revolution is the 5G network. It provides the speed, reach, and decreased latency that IoT devices require. It allows them to communicate in real-time from networks of mobiles, cars, drones, and other 'things'. Initially, contained ecosystems of IoT devices will have the greatest impact.

For example, a food and beverage company, Paper Boat, equipped their factory with IoT sensors. They make the factory extremely flexible. They can change recipes in minutes and alter water and air pressure to ensure their products taste perfect.

2. Distributed Ledger Technology (DLT)

Distributed ledgers, also known as blockchain technology, build trusted networks by eliminating the need for centralised intermediaries. While the impact on the financial sector, from Bitcoin to Ripple, is well known—distributed ledger technology is changing many industries.

Social platforms are being built on DLT. With privacy concerns and the rise of fake news, consumers are demanding trustworthy social networks, and companies are responding. Skycoin BBS is a distributed social platform that gives individuals more agency and control over their data. Their social network has no central server or central authority—a key differentiator to incumbent competitors like Facebook, LinkedIn, TikTok, and WeChat.

In parallel, DLT is streamlining the logistics industry. A consortium, including AB InBev, APL, and Kuehne + Nagel, are tracking freight on a distributed ledger—complying with customs requirements while reducing data entry—increasing speed and control. Furthermore, the best transport companies can use the distributed ledger to verify superior performance and differentiate themselves from their competitors.

3. Quantum Computing

While quantum computing is the technology furthest from maturity and practical application, it has the greatest potential to solve the hardest computational problems and have the greatest impact.

Via APIs and software development kits, Microsoft, Rigetti Computing, and 1QBit are making their systems available for other companies to test and develop quantum solutions.

4. Artificial Intelligence (AI)

The power of AI to analyze data is optimising core business processes and automating marketing decision making. Even small advances in AI can have a huge impact.

For example, the Symphony Post-Acute Network uses AI to predict the needs and improve the care of 80,000 patients. This reduced readmission rates by 2%, saving more than \$13,000 per patient—over a billion dollars.

5. Virtual Reality (VR) + Augmented Reality (AR) = Extended Reality (ER)

Extended reality, virtual and augmented reality, is changing how we engage with the world. While we've seen the impact on gaming and movies, they will have a greater impact outside of entertainment.

Companies can connect face-to-face with customers across the world. A global customer base, and remote workers, give companies an unheralded opportunity to scale their operations and reach. For example, BMW employees design and develop new cars—working from anywhere in the world.



Integrating these technologies

89% of companies are implementing at least one of the above technologies into their business. However, the greatest competitive advantages will come to companies who integrate them in concert. As we can see by analysing the three following companies, integration compounds their competitive advantage.

Volkswagen



Volkswagen is integrating quantum computing, AI, and distributed ledgers. They use quantum computing to simulate the chemical structure of their batteries and test traffic flow optimisation. They are using distributed ledgers to build automatic payments at petrol stations, create tamper-proof odometers, and protect cars from hackers. And working with Nvidia, they are adding AI systems to their cars.

Bosch Rexroth



The engineering firm, Bosch Rexroth, is building a “factory of the future” using AI, IoT, and extended reality. Looking to create truly agile manufacturing where they can rapidly personalized products and services, they are building an assembly line that supports product-oriented design, customization, and scalable production runs.

Golem



Golem, who defined themselves as “Airbnb for computers,” are using blockchain technology to create an IoT network of computers to pool computer power into an enormous virtual-supercomputer. It enables users to perform extensive computer processing for far cheaper than using Amazon and Googles’ cloud.

These technologies will revolutionize every industry. In the next section, we examine how they will transform marketing.

"The greatest competitive advantages will come to companies who integrate them in concert."

Section 3.

HOW THE NEW TECHNOLOGY STACK WILL TRANSFORM THE OLD DIGITAL MARKETING FUNCTIONS

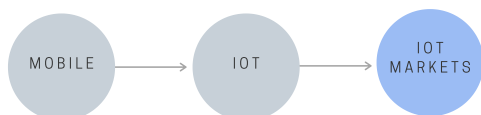


In 2020 and beyond, we will charge into a Post Digital Marketing world—filled with opportunities for innovators—and threats for the Luddites.

We're moving from static to dynamic processes, from a black box to verifiable data, and from discovering niches to creating new markets. It's the responsibility of every Marketing Executive to prepare for this change.

Specifically, every Marketing Executive must ask themselves, where can we find a competitive advantage?

1. From Mobile to IoT markets



While mobiles connect 5 billion people to the internet, the intelligent-IoT will connect billions, perhaps trillions, of devices. This will produce an almost unfathomable amount of data for marketers.

Tracking

The way we're tracking people's online behaviour with cookies and unique IDs right now is how we'll track people's offline behaviour through the IoT.

Customer Journey

The IoT will give marketers insight into the entire customer journey. Then, as they identify the moment that prospects are ready to buy, they will send push notifications, run ads, and offer discounts.

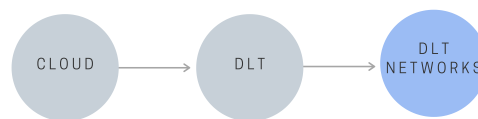
Data

Marketers will have way more data to analyze. They will be able to optimize their websites and ads, identify and target smaller niches, and personalize their messages.

Lifestyle information

The IoT devices in our cars, on our coffee machine, and inside our shoes will show marketers exactly how their products are being used. They'll reveal how we're living in incredible detail.

2. From Cloud to DLT networks



DLT networks are celebrated for their security and the trust that creates. But marketers will apply the underlying technology in new and interesting ways.

New advertising model

Companies will pay users to watch their ads. Distributed ledgers can be used to make micropayments, and to verify a real person, and not a bot, viewed an ad. This is already happening on the Brave Browser; users are paid with Brave Attention Tokens for watching advertisements.

Licensing

Marketers will license content from micro and nano-influencers. Licensed content will include video, images, music, and digital art. They will use this content on their websites and in their advertisements.

Loyalty programs

Loyalty programs will be one of the easiest ways for corporations to centralize a decentralized platform. They will use a branded currency that's redeemable among a cooperative of retailers; incentivizing customers to stick within their ecosystem and earn rewards.

Verifiable data

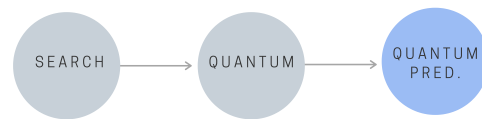
Everything will be verifiable. Which users are real people and which are bots? Which analytics data can we trust? With verifiable analytics and advertising platforms; there will be less-garbage-in—and less-garbage-out.

1-to-1 communication

With verifiable and trackable user profiles, marketers will be able to personalize communication autonomously at scale. However, this tactic will be limited as new privacy laws are introduced to curtail these practices.



3. From Search to Quantum predictions



The history of search has been reactive. With quantum computers, marketers can start being proactive and predict with great accuracy what their customers want and how their needs are changing.

Prediction

Predicting trends and forecasting sales will move from an art to a science with quantum computing. As quantum computers can handle the complex factors required to make accurate simulations, their productions will be accurate enough to inform major marketing decisions around—especially for product choices.

Voice search

Machines are becoming better at understanding human voices due to quantum computing technology. The improved user experience will lead to an increase in voice searches.

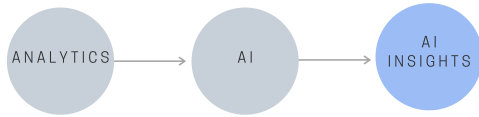
SEO

SEO is changing. As users are increasingly asking Siri or Alexa questions instead of typing a question into Google, it will change how websites are ranked and how consumers find information. SEO will become more intent oriented, rather than keyword oriented. This is possible thanks to the Natural Language Processing powered by quantum computing.

Complex multivariate analysis

The way companies test their marketing activities will change. Previously, testing has predominantly been static; one variable is tested against another at a time. Then as that variable becomes the norm; new variables are tested. This ignores dynamic effects. More variables within the entire funnel will be tested as they affect each other down the line. For example, it may be far more profitable to make a change that, while reducing leads, attracts far more valuable customers.

4. From Analytics to AI insights



Analytics made marketing decisions more accurate. It took us from the intuitive age of ad-men to the testing age of analytics. But AI will make marketers far more accurate and goal oriented than ever before.

Goal orientated insights

With goal-oriented insights, artificial intelligence doesn't only optimise your metrics—it makes sure you're using the right ones. It automatically adapts its behaviour to meet your goal.

Market trends

While analytics focused on historical behaviour, artificial intelligence will help predict trends in the market.

Error reduction

AI will significantly reduce the human errors of marketers when analysing campaigns, whilst analysing more data.

5. From Social to Virtual communication



Social let us know what everyone else thinks about a product. Virtual and augmented reality will give us greater insight into a product, service and brand so we can make our own minds up.

Immersive storytelling

Virtual communication will give birth to immersive storytelling. Consumers will feel as if they are inside the story as marketers deliver their story or show off a product.

Virtual inspection

While social media showed you the product, virtual and augmented reality will let you inspect it from every angle. It is more akin to try before you buy.

Globalisation 3.0

It helps marketers market to global customers. As they can inspect products with greater detail, they'll be more likely to buy products, and increasingly services, from the other side of the world.



Next generation marketing

As traditional marketing roles have taken a back seat to digital marketing, digital marketing will now take a backseat to a new marketing function — that leverages and integrates these new technologies.

Similar to digital marketing, the most successful next generation of marketers will be those who integrate these technologies — compounding the effect of each technology's specific advantage.

However, as we saw in digital marketing, the competitive advantage is attainable only to the early movers. This is why companies like BMW, Bosch Rexroth, and Rigetti Computing are testing and implementing these technologies now. Once they become an industry standard — it's too late to earn an outsized profit.

Indeed, it will separate the winners from the 'also rans' over the next decade — reflected in returns to investors, technical innovations, and impact on the economy.



PREPARING FOR TOMORROW

Where to begin?

We've seen how a new stack of post digital marketing technologies are taking us to a new decade of growth. While the technologies are changing, there is one thing that remains consistent — the companies that successfully capitalize on these technologies will leverage the best people.

Human ingenuity will always underpin technology. Implementing this technology revolution begins with the right people — right now. Organisations must develop their capabilities in parallel to the technologies development; or they will miss this unprecedented opportunity.

We hope you've found this analysis informative and wish you the best over the coming decade.

"Human ingenuity will always underpin technology. Implementing this technology revolution begins with the right people — right now."

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