

designprodigy

# *2019 marketing predictions:*

HOW AR AND VR WILL BE THE SECRET  
SAUCE TO YOUR OMNI-CHANNEL  
MARKETING STRATEGY





# *overview*

## INTRODUCTION

In today's marketing world, reaching the customer is no longer an impossible task. At the tap of a screen, marketers can reach customers at both speed and scale. The greater challenge, however, is how to connect with the customer. In a world where customers are constantly bombarded with pop-up ads and spam email, marketers find it increasingly difficult to get themselves heard. How can marketers rise above the noise to deliver a message that truly matters to consumers?

Successful marketers must stay ahead of the curve. They must innovate. Most importantly, the successful marketer constantly redefines the lines between possible and impossible. To help marketers, Design Prodigy has identified three technologies that are set to sweep the playing field in 2019. We foresee these technologies taking off in the luxury, consumer electronics, and enterprise software industry.

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## *how ar and vr will be the secret sauce to your omni-channel marketing strategy*

### EXECUTIVE SUMMARY

While many brands have caught on the tide of digital marketing and quickly established an online presence, the vast number of marketing channels means that the way a customer interacts with a brand has become increasingly fragmented. To help marketers tie these channels together into a seamless omni-channel strategy, Design Prodigy has identified a solution that is set to sweep 2019 across three key industries: Augmented Reality (AR) and Virtual Reality (VR) technology.

In the luxury industry, AR and VR can help marketers reinvent the luxury experience in order to reach out to fussy millennials who prefer a digital experience. In the consumer electronics market,

AR and VR can deliver the allure of a product's promised user experience to attract attention in a crowded market. Lastly, AR and VR can inject new life in the enterprise software market that is characterised as inflexible or slow to innovate.

The culmination of technological development and increasing consumer awareness and adoption of AR and VR makes 2019 the perfect time to make use of these tools, especially in APAC where economic growth in all three industries are set to soar. With AR and VR, marketers will gain new tools that are indispensable to stitching online and offline channels together into a seamless customer experience.



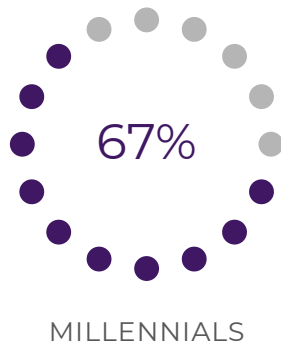
## *augmented reality and virtual reality technologies*

Pokemon GO, snazzy Snapchat filters, and fancy headsets like Oculus Rift. Although terms like AR or VR may sound foreign, both technologies have already entered the mainstream. AR (Augmented Reality) transposes a virtual layer onto an image-capturing, whilst VR (Virtual Reality) transports the user into a virtual realm. Both technologies break boundaries by crossing into the third dimension, creating stimulating sensory experiences that blur the boundary between real and ideal.

**Lying at the intersection between digital and real, AR and VR offer a solution to one of marketing's biggest problems: how to create a seamless customer experience across multiple channels using an omni-channel strategy.**

With AR and VR, marketers can meld digital platforms and real-life interaction together. These powerful interactive tools create boundless possibilities for marketers to redesign the consumer experience.

## *heritage meets cutting-edge: the luxury industry*



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67% of Millennials and 56% of Gen Xers prefer to shop on online rather than in-store. (Big Commerce)

How do you sell an experience to a customer who does not even want a real-life experience? This challenge plagues luxury marketers who are trying to get to the bottom of the millennial market. Millennials are tough nuts to crack: unlike consumers of the past, they are not easily fooled by the sleek window displays, perfumed air, and polished salespersons of luxury stores. In fact, they do not even set foot in these fancy stores: research shows that 67% of millennials prefer to shop online instead of in-store. How can marketers transform the luxury experience to pull millennials in?

The answer: bring luxury to the virtual world. Forward-looking players of the luxury industry have already made headway in the AR and VR world. For example, Gucci's 2017 Gucci Hallucination campaign for their 2018 Spring collection used in-store VR and on-app AR to create an immersive viewing experience of their products. In-store customers were given devices so that they could view artworks by Monreal in a 360° panorama. Customers who could not visit the stores could use QR codes to view the artworks in AR form on their phones. In these artworks, Monreal featured Gucci products in the style of Renaissance-style portraiture. In a perfect blend of old and new, Gucci's luscious Spring pieces come to life against Monreal's dreamy backdrops.

## *heritage meets cutting-edge: the luxury industry*

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*virtual reality emerges as a key player, bringing to life the absurd, the ingenious, and the impossible.*

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With \$2.2 billion in sales revenue in the first quarter of 2018, the results of Gucci's campaign speak for themselves. Their success also highlights an important strategy in the use of AR and VR: whilst companies should include experiential technology in their campaign strategy, it cannot take centre stage alone. The effectiveness of Gucci's campaign relied on the intrigue surrounding Monreal's old-fashioned yet modern artworks. At the same time, without AR or VR, viewers need to stretch their imagination to take in the visuals. Here, virtual reality emerges as a key player, bringing to life the absurd, the ingenious, and the impossible. Putting art and technology together, Gucci achieved the perfect blend of heritage and cutting-edge that resonated with its audience.

Gucci's case is just one way luxury marketers have engaged in experiential technology. French brand Boucheron also employed AR, except in the online world: Boucheron used AR technology to let customers "test" their products on their online store. The campaign was a success: AR boosted their online traffic by a whopping 50%, an indication that customers receive online AR technology warmly.

These two case studies show that luxury marketers need to strengthen both their online and in-store experience through the use of digital tools. To reach out amongst millennials, luxury brands must create an all-inclusive, immersive digital shopping experience that spans the real-world and online plane. These eye-capturing experiences provided by VR and AR help marketers strengthen persuasion and anticipation.

## *heritage meets cutting-edge: the luxury industry*



AUDI VR

### AR & VR IN PRODUCT CUSTOMISATION

Why stop at passive visual experiences? Luxury marketers can also use AR and VR to ride the wave of product customisation. Increasingly so, today's millennials are pinning their focus on meaning-making and self-actualisation, leading to the rise of hyper-personalisation. Luxury marketers who are quick to capitalise on this customisation trend reap the benefits of immense success, as seen by Burberry's trench coat campaign.

AR and VR enable customers to interact with items to envision their dream product. Audi has already leveraged on this potential, using VR showrooms where customers can configure their dream car exactly as they imagine. The immediacy and verisimilitude of VR will take the customer into a world of limitless possibilities and breathe life into their imagination.

Of course, both technologies are not perfect. Considerable friction still remains in the implementation of AR and VR: marketers have to vault over the hurdle of convincing customers to download specific apps or to wear a headset. For VR in particular, the clunky headset is incongruent with the luxurious vibe brands seek to project. These barriers to entry limit the marketer's potential. Nevertheless, looking at how luxury brands have previously managed to pull off successful AR or VR campaigns, this point of contention seems to be a paper barrier than a real obstacle to success.



## *seize the experience: consumer electronics*

How can marketers make their voice heard? The key challenge marketers in consumer electronics face is in differentiating their product from a glut of others in an overflowing market. In 2018 alone, almost 50 smartphone models were released. On top of a saturated market, many electronic products are converging towards a narrow margin of specifications and designs, each competing to offer the best user experience. With little differentiating factors, brand loyalty is a heavyweight in decision-making for most consumers in the domain of consumer electronics. Marketers now play an unyielding game of tug-of-war, where great effort translates to little results. How can you turn the tide to your favour?

**In 2019, marketers need to emphasise on the promise of optimal user experience for loyal consumers to make the switch.**

This emphasis is particularly lacking on online channels where information is limited to a two-dimensional slew of technical numbers that mean little and airbrushed photos that hardly translate into the actual product.

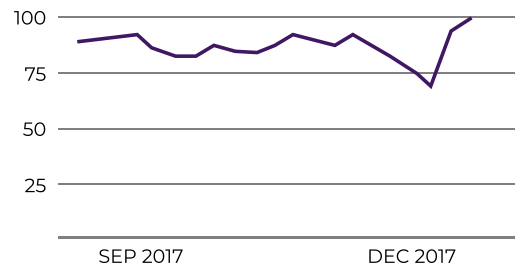


## *seize the experience: consumer electronics*

Not many consumer electronics businesses have fully capitalised on the possibilities of AR and VR. However, marketers can examine successful AR or VR campaigns from other industries for a shot of inspiration. For example, BMW's i3 and i8 automobile campaign rolled out an AR visualisation app, where customers can preview the cars in their own environment. Customers are given free rein to explore to their heart's content, from the seats and doors, right down to the boot of the car.

The interactivity of AR can be put to use in a dozen other ways. Launched in 2017, IKEA's AR application allowed customers to picture IKEA furniture, exact to scale, through their smartphone lens. With a simple drag and drop, customers can virtually transport furniture into their homes. The result? Google searches for IKEA increased within weeks of its release, and the app secured its spot as the second most popular app built on Apple's ARKit.

INTEREST OVER TIME



Both BMW and IKEA's use of AR highlight a salient point: emotional products need to evoke emotion within the customer. Be it delight, surprise, or empowerment, AR can draw out latent impressions of a product and transform them into hallmark product experiences. The richness of the visuals offers a tantalising taste of the promised user experience within the user's own environment. Then, beyond "seeing is believing", the capabilities of AR prove that seeing is living.

## *seize the experience: consumer electronics*

Applying these insights to consumer electronics: marketers can break free from the static chains of glossy photos and meaningless figures by including AR capabilities in online spaces. Using AR, customers can examine a product from all angles, zoom in on specific features, zoom out to the overall aesthetic, and even gain a solid grasp of its actual size. This last feature can complement purchases of larger electronics in-store, allowing customers to easily check the fit of the product in their home before heading out to make the purchase. By enticing the consumer with a taste of the promised user experience in greater vividness, marketers can hold greater persuasive sway over them.

### **VR IN PRODUCT ADVERTISEMENT**

Using VR advertising, marketers can also tease the promised user experience on a more temporal scale. Reimagine Apple's recent advertisement for the iPhone XS - smooth, seductive, and inviting - for example, and transform it into an immersive VR 360° video.

Consumers can experience iPhone XS's promised sleekness in a way that will overwhelm their senses and heighten their expectations. This novel mode of advertisement will not only lure the user into greater receptivity towards the brand but also help reconstruct brand image as innovative and cutting-edge. These qualities are essential in markets like consumer electronics, where technology underpins products.



**ZEPETO**

Again, marketers will face the challenge in convincing users to download an app or put on a VR headset. However, the convenience of having a detailed product specification at one's fingertips may overshadow the initial high effort required to obtain it. To overcome these challenges, brands can collaborate with existing AR apps like Snapchat or Zepeto and tap on their large user base, or make use of their brand's own VR headset in the campaign. See Adidas's recent AR collaboration with Snapchat, for example.



## *evolve or revitalise: enterprise software*

**94%**  
OF B2B BUYERS  
ADMITTING TO  
RESEARCHING ONLINE  
BEFORE MAKING A  
DECISION

Bogged down by a maze of complicated workflows and endless configurations, marketers for enterprise software face the insurmountable task of making their product decipherable. When buyers find it difficult to understand the software and its business outcomes, it may put them off, preventing marketers from securing deals that should be easily snagged. To add to the challenge, B2B buyers are also scouring online spaces to cinch the best deal. With 94% of B2B buyers admitting to researching online before making a decision, it is evident that buyers no longer merely reach out to potential vendors for a sales pitch. As a result, businesses, especially those that have yet to launch an online presence, are struggling to deal with these changes in customer behaviour. The key question remains: how can marketers convey their product in simple terms to buyers who no longer use traditional channels?

It is high time to switch it up and employ technology in effective and attractive ways.

**In an industry that has yet to fully master the ins and outs of digital marketing, VR will bring an unexpected hand to the playing table.**



## *evolve or revitalise: enterprise software*

No doubt, a number of visionary leaders in B2B companies have already managed to pull off VR campaigns. Key Technology, a food processing systems manufacturer, produced a polished VR 360° video in 2015 to showcase the VERYX food sorting machine. The video takes the buyer straight into the machine's inner workings, showcasing the product design from all angles and demonstrating the VERYX in action. The buyer is able to see how exactly the machine works, a point of view that is impossible to get even if the buyer were to examine the machine in real life.

In this manner, Key Technology has broken down a complex product into comprehensible steps and processes. The power of VR is evident: businesses can capture the buyer's attention and communicate business outcomes in a simple manner.

The VR experience can blow up static screenshots into an interactive process where buyers can directly explore and experience the software interface. As they visualise how the software will work for their business, buyers will understand if they are a good fit with the product.

**VR will help buyers build a mental model of the software, and provide more comprehensive information, far beyond product screenshots that say nothing about the product's functionality.**

The persuasive powers of VR are nothing to shrug at. But the clincher? Marketers can use VR in both online and offline spaces, allowing them to fit it to existing strategies.

## *evolve or revitalise: enterprise software*

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*This approach improves skill retention versus traditional training methods by up to 100 percent and reduces the length of technical training by up to 150 percent.*

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### VR IN PRODUCT TRAINING

And why not stretch it even further? Make use of VR to train buyers how to use the software later in the customer journey. Enterprise software companies can follow the lead of enterprise hardware businesses that have already integrated AR and VR experiences for a safer and more effective training program. For example, industrial conglomerate Honeywell has equipped both existing and newcomer workers with VR and AR tools. While experienced workers go about their day, work processes such as installation or maintenance are captured and transmitted to newcomer workers. Using AR, newcomers can directly view the information as an overlay as they work, nudging them to the right steps and outcomes. The results were tremendous: training time was cut by half, operational costs were reduced, and skill retention soared by 100%.

For enterprise software, where training takes place within the constraints of a computer screen, the benefits of VR in product training can extend far beyond what is explored above. The interactive processes of VR will blow up the computer screen into 3D reality, widening both the physical space of the software and the user's mental acuity of it. Icons and workflows will no longer look as confusing, translating into a less entrapping mental space for the user. With VR, the ease of software learning creates a pleasant user experience, propelling more buyers to make the purchase at the end of the customer journey.



## *evolve or revitalise: enterprise software*

But it is not as easy as it sounds. On top of existing challenges in implementation, a major limitation unique to enterprise software marketers lies in the fact that many still use traditional marketing methods without fully exploiting digital channels. These marketers may not be familiar with the how's and what's of integrating technology into their marketing strategies and run the risk of bungling their attempt to use VR. Yet, the fact remains that there is a pressing need for marketers to innovate and utilise technology in creative ways for a greater reach. In particular, VR is a good fit because it can complement traditional channels that enterprise software marketers use.

## *why is 2019 the year for ar and vr?*

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*The appetite for AR and VR is here, and it is up to marketers to fulfil it.*

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The culmination of developments in AR and VR has primed the world stage for them to make their final debut. AR, in particular, has dominated the second half of 2018. The release of Animoji and Zepeto have propelled AR technology to the forefront of mainstream trends, which are set to continue well into 2019. As the general public come to familiarise themselves with these technologies, new doors will be opened to the marketing potential that AR and VR hold. While VR has not enjoyed as much mainstream press in 2018 as AR has, it still remains within the public's consciousness and offers many ways to be used.

With increased consumer awareness of these technologies, VR and AR are exciting ways to market your product without fear of alienating consumers who may find it too foreign. Between now and later, 2019 is the sweet spot for marketers to use AR and VR before they become the new norm. The appetite for AR and VR is here, and it is up to marketers to fulfil it.

## *why in APAC?*

### MOBILE SHOPPING PENETRATION WORLDWIDE AS OF MARCH 2016, BY REGION



- PURCHASED A PRODUCT OR SERVICE ON A MOBILE DEVICE
- USED A MOBILE APP TO MAKE A PURCHASE

Fronted by key players such as China and India, APAC remains as a region of economic expansion even as IMF predicts a bleak global outlook amidst rising tensions. Across digital spaces, business is booming - APAC held a combined 38.2 annual online transactions per person in 2016, higher than other regions. With the highest percentage of mobile shoppers at 46%, APAC is home to the highest number of tech-savvy consumers, who are unlikely to shy away from AR and VR technologies. The potential of APAC makes it the perfect hotbed to successfully launch AR and VR marketing into mainstream space.

Many eyes are set on the region for development of the luxury industry, especially with China leading the growth of many luxury brands. In 2018, consumer electronics saw the largest revenue share in APAC, indicating a huge number of tech-savvy individuals who are hungry for the latest gadget. AR and VR marketing would undoubtedly be greeted with a warm welcome. In the enterprise software market, industry experts anticipate the greatest growth in APAC as well. As the region remains as a key player in global growth, more and more APAC businesses will see gaps in productivity that enterprise software can fulfil.

**On all fronts, APAC is set to see economic growth that marketers can propel to greater heights using AR and VR.**





# *what do you stand to gain?*

With AR and VR as experiential tools, marketers are sitting on a goldmine of possibilities in delivering the brand experience directly to the user. The convergence of virtual and reality presents both AR and VR as an indisputable ingredient to omni-channel marketing.

You no longer need to spend hours agonising over how to effectively integrate different channels to create an omni-channel marketing strategy. Nor do you need to rack your brain to find ways to revive and sustain interest in a product. By riding on the trend of AR and VR, marketers can catapult a brand into mainstream awareness whilst simultaneously revamping a brand image as innovative. It is only when you stay ahead of the curve that you can reap the tangible benefits of AR and VR before consumer fascination wears off.

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# *2019 marketing predictions:*

HOW CAN WE FEED YOUR AI  
MARKETING TECHNOLOGY STACK  
WITH THE RIGHT DATA



# *how GAN will feed your ai marketing technology stack with the right data*

## EXECUTIVE SUMMARY

Heralded as game-changers, artificial intelligence and deep learning are commonly thrown around by marketers with no clear idea on what it is and how to use it. To keep marketers afloat, Design Prodigy has dished up a comprehensive guide that will serve as the marketer's navigation system to AI. In particular, this article will take you through the lifeblood of AI solutions: duelling neural networks (GAN).

Here's how GAN is poised to transform three key industries in 2019. In the enterprise software market, GAN can bolster the data needed to build and optimise a predictive lead scoring model. Next, to engage the diverse customer market of consumer electronics, GAN enables marketers to automate segmentation. Lastly, GAN can concoct vast amounts of personalised ad content for consumers who crave a personal luxury experience.

The confluence of increased AI adoption in marketing and persistent lack of understanding creates the perfect opportunity for GAN to take the stage in 2019, particularly in APAC where the use of AI is bound to be potent. By tapping on GAN, marketers can milk the benefits of personalisation and wield AI tools without fear of backfiring.



## *artificial intelligence*

What exactly is artificial intelligence? Machine learning? Or neural networks? As the field progresses, new phrases are coined at such a rapid pace that most people struggle to keep up with what they mean, let alone with what they do. Unbeknownst to most, AI has crept into rhythm and pace of daily life. Siri and Alexa, Youtube's recommended feed, and even Google's predictive search - these are just a fraction of everyday conveniences powered by AI.

But for a marketer in today's digitised climate, it is essential to understand your tools to remain ahead of the game.

**Throwing AI at any problem without full comprehension of its capabilities and constraints is paramount to tossing eggs at a brick wall, expecting it to have the strength of a grenade.**

To begin with, artificial intelligence (AI) is an area in computer science that involves the use of computers to mimic human cognition. Computers achieve these human-like capabilities by using algorithms, which are sets of rules to be followed when computers carry out tasks.

## *artificial intelligence*

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*the brilliance of AI will help marketers navigate the tricky maze of data-driven marketing.*

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Machine learning is a subset of AI where computers learn to carry out tasks in a competent manner. This learning occurs as computers receive data input and modify their algorithms. On the other hand, deep learning is a subset of machine learning where computers learn using neural networks, which are multi-layered algorithms modelled after the human brain.

By arming machines with human-like capabilities, marketing is transformed into a personalised brand experience. AI empowers the marketer, who no longer shoots arrows in the dark, but constructs intimate encounters between the brand and consumer. Accompanied by a super-brain that crunches data and spits out actionable insights at dizzying speeds, marketers can make the best decisions on how to captivate the consumer and feed these decisions back into machines for automation.

The breadth of AI is limitless, with reaches into every step of the customer journey. At every point, marketers can optimise the marketing strategy for greater engagement. In essence, the brilliance of AI will help marketers navigate the tricky maze of data-driven marketing. But how exactly can we use AI for marketing?

## *duelling neural networks: the data quandary*

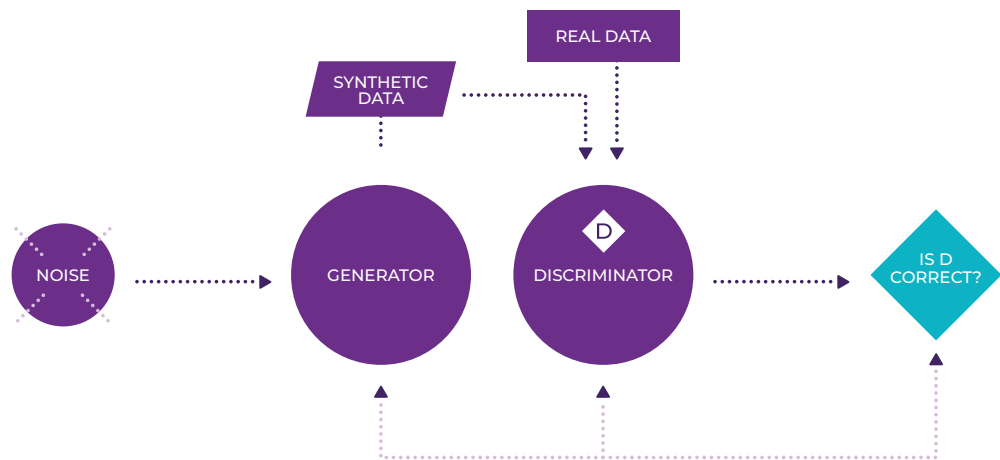
To bring AI to life, we need vast amounts of the right data - to train machines and to feed trained machines. Even before insights are generated, marketers need to collect, clean, sort, and select the right data from an expanse of noise.

**This information tsunami can easily overwhelm the marketer with intelligible signals, eventually transfiguring efficiency and empowerment into a decision nightmare.**

On the other end of the spectrum, marketers may wade through a data lake only to come up short of the right data, preventing them from moving forward into the era of data-driven marketing. If only we could use AI to produce ready-to-use data and galvanise the paralysed marketer.

Here's where duelling neural networks come into the picture. More commonly known as generative adversarial networks (GANs), duelling neural networks were introduced by Ian Goodfellow in 2014. As the name implies, duelling neural networks consist of two neural networks that are engaged in a digital spar. The eventual outcome of this digital spar would be the production of synthetic data that is eerily realistic. In theory, whatever data needed for whatever purpose can be created. For example, GAN can create images from text instructions - effectively generating imagination from a set of parameters.

## *duelling neural networks: the data quandary*



In detail, this digital spar serves as training for both neural networks. One neural network, the generator network, produces a counterfeit bill without knowing what a real bill looks like. The counterfeit bill is sent to the other neural network, the discriminator network, which determines whether the bill is real or not. Because the discriminator network has already seen a dataset of real bills, it knows some features that distinguish a real bill from a counterfeit and classifies the bill as fake. This signal feedbacks to the generator network, who

learns to create a more realistic bill to trick the discriminator network. Both networks cross-train the other in an eternal battle of wits: the generator learns to create more realistic bills from the discriminator's output while the discriminator learns to identify more features that distinguish between real bills and fake bills from the generator's output. From a small dataset of real bills, duelling neural networks can eventually synthesise an enormous set of counterfeits that are indistinguishable from the original to the human eye.



## *duelling neural networks: the data quandary*

The ingenuity of data production will be groundbreaking in the realm of marketing. Marketers can simply select a small set of representative data to generate an immeasurable trove of information. In lead scoring or automated personalisation, this potent tool will defend against the deluge of data that whammy the marketer from all directions.

Armed with GANs, marketers can focus on data that is relevant and avoid the biggest pitfall of automated marketing: letting the data control you.



## *optimise without sacrifices: enterprise software*

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*Lead quantity and quality ranks as the top challenge to securing sales, yet only 44% of B2B companies use lead scoring systems.*

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ARE YOU CURRENTLY UTILISING LEAD SCORING WITHIN YOUR ORGANISATION?



● YES

● NO

● NO, BUT PLAN TO DEPLOY < 12 MONTHS

● NO, BUT PLAN TO DEPLOY > 12 MONTHS

How do you boost dismal conversion rates? This is an unresolved question that has long plagued the B2B industry. With 13% of leads converting to opportunities, and 6% of opportunities converting to deals, the B2B industry saw a lamentable lead-to-opportunity conversion rate of 0.0078% in 2014. A quick scan through current marketing practices in B2B will reveal an obvious answer. Lead quantity and quality ranks as the top challenge to securing sales, yet only 44% of B2B companies use lead scoring systems. Without comprehensive data on how consumers think and behave, whatever attempts to convert leads into deals would be equivalent to groping in the dark. Clearly, it is past due for B2B businesses get into the game of predictive lead scoring.

But what exactly is predictive lead scoring? In brief, lead scoring assigns a quality score to each lead based on a lead scoring system. In predictive lead scoring, the weighting of each scoring factor, such as number of emails sent or number of website hits, is optimised by algorithms so that lead score accurately reflects lead quality. Predictive lead scoring unlocks automated insights that map customer behaviour to buying outcome, enabling businesses to prioritise leads, justify decisions, optimise resources, and most of all, increase conversion rate.

## *duelling neural networks: the data quandary*

For example, enterprise software firm Bizible opted to hitch onto the advantages of predictive lead scoring as they transitioned from having small business buyers to serving enterprise buyers. This shift in focus required Bizible to operate on more sophisticated business infrastructure that could secure a greater degree of conversion success. For Bizible, the solution was predictive lead scoring. Together with an AI company, Bizible built a tailor-made predictive model that fortified and streamlined the sales process, bringing the lead-to-opportunity conversion rate to a startling 16.4% amongst the top-ranked leads.

Sounds great, right? But GAN can take it a notch further. Firstly, because Bizible had insufficient data to build their predictive scoring model, the database used was bolstered by a proxy database. The proxy data may not fully match the Bizible's targeted customer profile, creating a domino effect where the predictive model becomes

skewed and the lead scores turn out inaccurate. Instead, Bizible could input its data into the discriminator network and train the generator network to produce data that is objectively more accurate. By augmenting real data with GAN-generated data, Bizible could have created an even stronger predictive model right off the bat.

Secondly, because machine learning enables any predictive scoring model to strengthen as more leads come in, the model is not immediately optimised for accuracy. With GAN, different permutations of realistic lead data can be produced to feed into the lead scoring model before it goes live. What will the marketer get out of it? A working predictive model that is already optimised, and an expedited track to success. By integrating GAN into predictive lead scoring, marketers can overcome the slump of missing data and combat the wave of unorganised data.



## *optimise without sacrifices: enterprise software*

The goal of GAN is to create a lead scoring model that is deadly precise without sacrificing any leads that could have been converted.

But no solution is without limitations. GANs are notoriously hard to train, consuming hours of training on GPU before it can produce data that is up to scratch. This poses an issue when the customer profile changes over time, causing GAN-generated data to fall out of sync with actual lead data. This is why GAN is effectively limited to giving businesses a headstart in predictive lead scoring. Once the predictive model is optimised, businesses no longer need to rely on GAN-generated data to augment the data input.

Even though GANs thrive on a small training dataset, a dataset with a limited scope may result in data generation that is not representative of the actual customer spread. Falling far short of a ready-optimised predictive model, GAN can even lead the model astray. To overcome this potential pitfall, marketers need to take great care in selecting a representative dataset. However, this issue is unlikely to crop up amongst enterprise software businesses, whose market segments are usually not too diverse.



## *personalised touch: consumer electronics*

FROM 2013-2016, THE SHARE OF ADULTS AGED 65+ IN THE US WHO OWNED SMARTPHONES ROSE FROM 18% TO

**42%**

No other market is as diverse as consumer electronics. Spanning across generations, individuals from all walks of life are equipped with electronic devices that do their bidding. As electronics become more inextricable from daily life, the user's experience with the Samsungs, Alexas, and Roombas of tomorrow will become more personalised to individual lifestyles. At the same time, consumers will seek diverging demands for how these devices should be purposed to fit the unique contours of their lives. In coming years, as the older generation plays a more prominent role in the consumer electronics, marketers in consumer electronics can no longer ignore this growing challenge: how do I market such an integral product so that each individual in a diverse customer base will extract a unique value from it?

The short answer: personalisation. By crafting each marketing message to address the individual needs of each consumer, marketers are scaling down from a loudspeaker marketing formula to a custom invitation whispered to the ear. Personalisation is key to engaging customers and reinvigorating growth, but it is not as simple as addressing each customer by their name.

## *personalised touch: consumer electronics*

For example, Chal-Tech was left to grapple with a shrinking pool of loyal customers after expanding its catalogue from DJ equipment to include household and fitness items. Even though Chal-Tech did not lose any expertise in DJ equipment, its expansion into other domains signalled a diminishing credibility to its original, DJ-loving customers. To lock in a diverse customer base, Chal-Tech opted for an automated personalisation solution that camouflaged irrelevant products from DJ lovers but left the site in its original state for other customers. The initial success propelled Chal-Tech to bring this personalised experience to the rest of the customers: each customer saw a different website layout that brought emphasis to their individual interests.

Chal-Tech's case underlines a cautionary tale: while personalisation is essential to greater engagement, the importance of segmenting

your customer base cannot be overlooked, especially as a company shifts focus. Chal-Tech's miraculous turnabout hinged on the identification of the different customers' needs and wants. Here, segmentation sheds light on the crux of each customer's lifestyle needs, funnelling the marketer's expertise on customer engagement in the right direction.

**Without the backbone of segmentation, personalisation cannot take flight.**

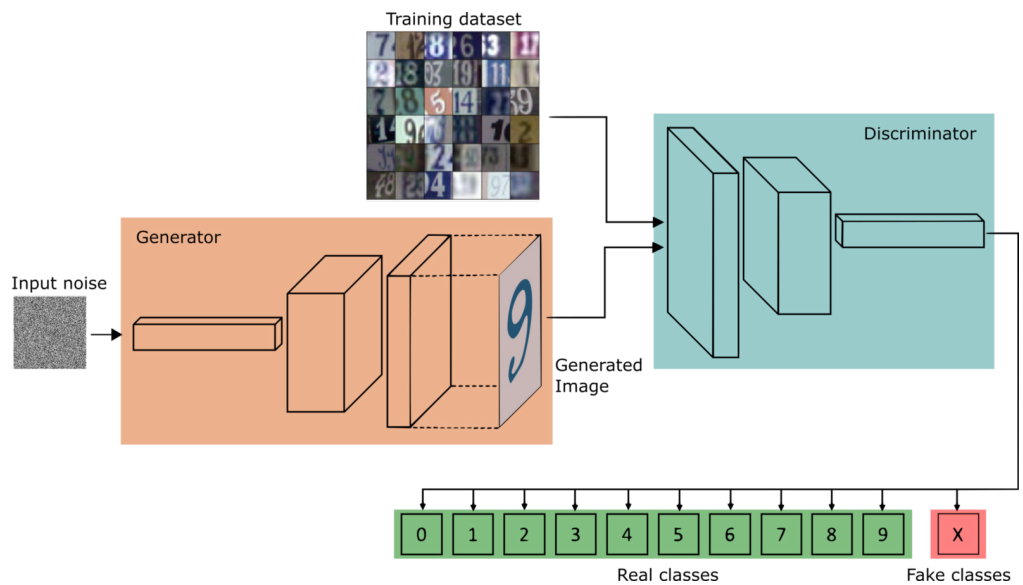
GAN comes in as a useful tool to automate customer segmentation. Instead of manually sorting your customer base into different classes, you can let GAN do the

# *personalised touch: consumer electronics*

grunt work of identifying key traits and behaviours that delineate the boundaries of different customer segments. Keeping in mind that GAN consists of two neural networks, GAN can potentially train itself into a classifier. Here's

how it works:

Recall that the end goal of GAN is to enable the production of good data. However, the discriminator network also offers room for other applications. By



SOURCE: TOWARDS DATA SCIENCE: Semi-supervised learning with Generative Adversarial Networks (GANs)

## *personalised touch: consumer electronics*

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*GAN essentially doubles up as data synthesiser and classifier, where the synthesised data augments real data to feed and train the discriminator into a powerful classifier.*

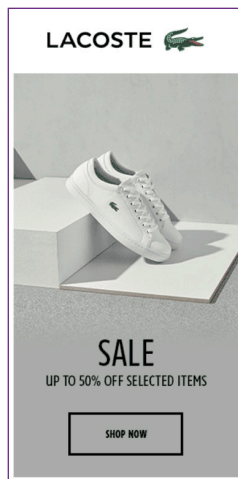
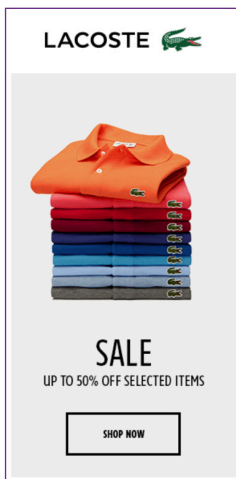
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expanding the binary categories of real and fake into more categories, the discriminator can learn to identify the distinguishing traits and behaviours of different customer segments. GAN essentially doubles up as data synthesiser and classifier, where the synthesised data augments real data to feed and train the discriminator into a powerful classifier. This eradicates two issues at once: dealing with an unorganised bulk of customer data and trudging through labourious analysis of each customer.

With automated segmentation in place, marketers in consumer electronics can hone a single marketing strategy in fine-tuned points that land precisely on the needs of every customer, wooing each lead into making the purchase. The working professional wants a pocket-sized personal assistant, the budding influencer desires a beautiful accessory with a powerful camera, and the retired grandmother needs an accessible way to stay in touch with her loved ones. Using segmentation-based personalisation to design different campaigns, the marketer can frame a single smartphone that is all of the above at once.

Again, the difficulty of training GANs will throw marketers against some roadblocks. Every single time the customer base expands, marketers will need to retrain the GAN-classifier to encapsulate a new customer segment. The tedium of neverending training iterations may put some off, but as GPU power increases and easier training methods are found, the advantages of segmentation-based personalisation may win them over.

## *algorithmic imagination: luxury industry*



What exactly do today's luxury customers want? In a bid to understand the modern consumer, luxury marketers are bombarded with conflicting information: millennials no longer value luxury for its exclusivity and status, yet again millennials covet personalised luxury experiences that cannot be found elsewhere. The millennial's consumption patterns remain mystifying, but a pivotal insight has emerged over the years: the compelling force of luxury is no longer brand recognition, but personal connection. To hook onto the elusive millennial, luxury marketers need to redesign the luxury experience into a personalised customer journey.

From initial exposure to cart checkout, marketers have at the tips of their fingers a million touchpoints that offer opportunities to connect with the customer. One crucial domain is programmatic advertising, where marketers jostle for ad spaces that will grab the attention of their hottest leads. Take a look at Lacoste's 2016 programmatic ad campaign, where marketers tested different banner formats and designs through various channels. Throughout the campaign, Lacoste tracked the most successful ads and channels, continually adjusting and optimising for greater engagement. With millions of impressions and thousands of eventual transactions, Lacoste's guts to take the experimental lane did not fail them. A salient point can be gleaned from Lacoste's smashing success: it is possible for continual refinement and experimentation to occur alongside the campaign without sabotaging

SOURCE: NUMBERLY: Success Stories



## *algorithmic imagination: luxury industry*

O2 SAW A HURLING  
**128%**  
INCREASE IN  
CLICK-THROUGH RATE

its success. From another perspective, Lacoste's campaign style is a subtle echo of the process of machine learning in AI.

In another instance, telecom company O2 engineered programmatic ad campaign to the O2 Refresh contract plan. With over a thousand advertisement variations, the campaign targeted the consumer's unique combination of phone model and geographic location in order to persuade them to drop by the nearest O2 outlet. The result? O2 saw a hurtling 128% increase in click-through rate.

Here's where GAN can take programmatic advertising to the next level. Instead of dooming oneself to creating over a thousand advertisement variations as O2 marketers had done, marketers can exploit the generative capabilities of GAN and let machines do the work instead. The flexibility of GAN entails a tool that is bursting with creative functions. With a snap of fingers, marketers can translate text directly into ad designs or spin a small sample of ad designs into a thousand other iterations aimed at different consumer types. By automating the creative process, GANs have cracked apart the barrier of bringing the personal touch online at large scales.



## *algorithmic imagination: luxury industry*

But luxury marketers are not only confined to the whims and fancies of GANs. Using CGAN (conditional GAN), a variant of GAN that accepts additional parameters and churns out a more specific output, luxury marketers can insert some degree of control into the creative process. By directly removing, adding, or modifying elements, luxury marketers can ensure that personalised ad content for each customer is completely flawless. Using cycleGAN, another variant of GAN, nondescript images can also be transformed into stylised art pieces (think Van Gogh or Monet). In the realm of luxury, where day-to-day products are practically artforms themselves, cycleGAN offers the perfect way to push this parallel further, personalised to each customer.

In sum, GANs shorten the marketing workcycle by accelerating the generation of unique content and by preventing marketers from tripping over an overload of ad design inspirations within the luxury industry.

But, in addition to the challenges of training GANs, marketers are also constrained to the creation of image-based programmatic campaigns. While it is possible for GANs to generate text, attempts to do so usually turn out results that are laughably nonsensical. GAN is a relatively new AI model, and successful application of GANs in linguistics is still underway. Until then, marketers can use GANs in conjunction with other creative text production AI models to automate programmatic advertising in a more comprehensive manner.

## *why is 2019 the year for GAN?*

Throughout the years, AI has been gaining traction in the world of marketing, but 2019 is set to be the year where AI-based marketing will snowball. With 84% of companies employing AI in 2018, it is expected that the numbers will rise further in the coming year. In a scramble to play catch-up, AI adoption rate will accelerate as remaining businesses make the switch to stay competitive.

The AI ecosystem is thriving, but not every marketer knows how to optimise AI tools for success. Given the massive hype about the benefits of AI marketing, it is easy to forget that an automated future is only a possibility, not a given. To bring this vision to life, it is crucial for the marketer to get a headstart in making their AI tools work.

Named as one of the top ten breakthrough technologies by MIT in 2018, GAN is no far-fetched gimmick from a sci-fi book. The scope of applications in GAN has expanded since its inception in 2014, bringing immense benefits in key fields such as medicine and cybersecurity. Once brought into marketing, GAN can optimise the data funnel that feeds into the AI, powering the automated tools that usher in the current era of personalised marketing.

**In the move towards AI and personalisation, GAN will serve as the marketer's bridge across the chasm of failure.**

## *why in APAC?*

### TOTAL POPULATION



7.593

BILLION

URBANISATION:

55%

Spanning from Australia to India, APAC is arguably one of the most diverse regions in the world. To carve out success in this region, marketers need to gain a deep understanding of APAC's customer spectrum. In dealing with such a fragmented customer profile, sophisticated marketing methods like lead scoring, segmentation, and personalisation emerge as indispensable to the APAC marketer. The data juice from GAN can rev up these methods into clear-cut solutions that are especially vital in APAC. Most of all, with 50% of the world's internet users concentrated in APAC, the region is primed to benefit from GAN-optimised AI marketing.



# *what do you stand to gain?*

The era of personalisation is here: not only are majority of consumers onboard with custom-made marketing at the expense of forgoing privacy, but personalised marketing has also shown to be 14% more effective than a general outreach. In light of this, using GAN to achieve a personalised touch in your marketing campaigns will enable you to latch onto greater customer engagement.

Besides, the diverse applications of GAN offer every marketer a solution to their AI woes. Instead of unwittingly strapping yourself to a dysfunctional AI stack, you can capitalise on the generative capabilities of GAN to empower yourself with efficient AI solutions. With GAN, you can gain a headstart and get the most out of your AI solutions.

designprodigy

# *2019 marketing predictions:*

HOW VOICE TECHNOLOGY WILL  
TRANSMUTE THE SOUNDSCAPE OF  
ALWAYS-ON MARKETING





## *how voice technology will transmute the soundscape of always-on marketing*

### EXECUTIVE SUMMARY

After automation, the advent of voice technology will be the next big wave that transforms the state of marketing into a customer-first interaction. To help marketers brace for the impact, Design Prodigy has explored the diverse ways in which voice technology will hit three key industries in 2019.

To stimulate growth, marketers in the luxury industry can use voice technology to nudge the service standard to unimaginable realms of luxury. In consumer electronics, marketers can tap on the compelling sway of user reviews using voice technology. Lastly, voice technology can also employ voice technology to optimise the lengthy process of lead qualification and nurturing.

The boom in voice-based search will result in new consumer behaviours moulded by voice-based interfaces and new modes of communicating with customers in 2019. Any marketing efforts using voice technology will land the greatest impact in APAC, which sees the highest adoption rate in voice technology. By capitalising on voice technology, marketers not only can establish dominance in uncharted territory but also connect directly with consumers with a human touch.

At the same time, voice technology will ignite new challenges in gaining digital presence across all markets. To remain virtually accessible to consumers, it is imperative for marketers to learn the ins-and-outs SEO for voice-based search.



## *voice technology*

OK Google, what is voice technology? Siri, turn the lights off. Alexa, play Despacito. With just this snippet of familiar voice commands, it is no stretch to imagine how voice technology has revolutionised the hyper-connected lives of modern society. Encompassing speech recognition and natural language processing among others, voice technology endows machines with the ability to produce and parse speech into comprehensible units. In addition to machine-generated insights about the human voice, voice technology enables machines to communicate with humans in a natural, equi-balanced state.

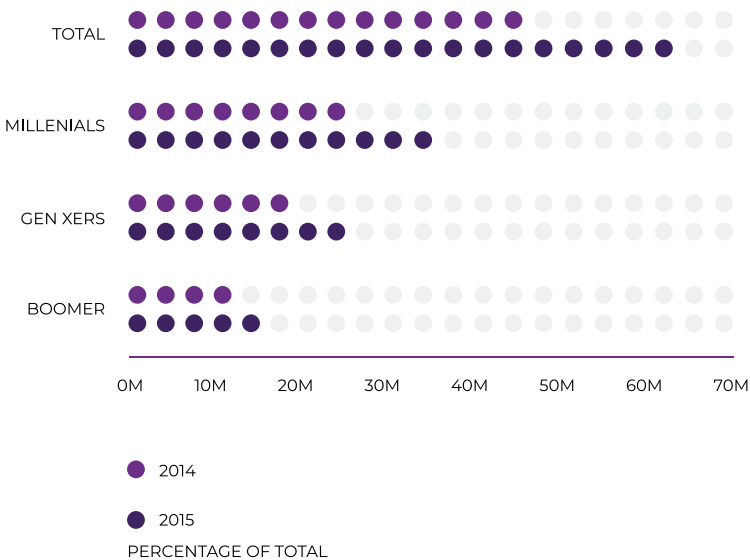
**Machine-human interaction is no longer constrained within the static confines of written communication, but has broken into the ranks of organic speech communication that had been unique only to humans.**

The rise of voice technology has excavated an unfathomable dimension into the realm of marketing. Voice technology has pruned the digital user interface from a complicated process into an intuitive back-and-forth flow, where visual bloat is taken out of the equation. Yet far from a restrictive medium, voice technology mediates conversation between marketer and consumer, reigniting the human touch in digital platforms. With voice as the point of contact, consumers can make the first move to reach out to brands at their whims and fancies. From the marketer's perspective, voice technology is a chance to transcend spatial and temporal boundaries to connect with consumers at the perfect moment.



# *the shadow butler: luxury industry*

## LUXURY BUYERS FROM 2014 - 2015 (MILLIONS)



In 2015, millennials constituted the largest portion of luxury buyers, but spent the least on average, signalling a spending gap that luxury marketers can pounce upon. However, with pursestrings drawn tighter than ever in today's economic climate, many marketers struggle to cash in on this opportunity for growth. But the troubles do not stop here. Today, unfavourable business conditions have monopolised the upper echelons of challenges faced by luxury marketers. Rising business costs, stiffer competition, lower spending - these niggling worries boil down to one key concern: how can luxury marketers tap on technology to foster growth?

At first glance, the exclusivity of luxury may seem incongruous with the ubiquity of technology. But frame it right, and technology can boost the excellent service that forms the backbone of the luxury experience. For example, luxury hotelier Marriott has recently partnered up with Amazon's Alexa for Hospitality to bring Echo devices into selected

## *the shadow butler: luxury industry*

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*voice technology takes the best of both worlds, offering exceptional customer service without infringing on privacy*

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hotel rooms. Guests can request Alexa to carry out an array of tasks, ranging from adjusting lights and asking about hotel amenities, to ordering room service and booking spa treatments. With a voice-activated assistant, each chain of actions will be condensed into a simple command, where every machine-human encounter is engineered for a more comfortable stay.

Marriott's example encapsulates the sweeping capabilities of voice-enabled assistants in the world of luxury. Far from creating friction with the notion of luxury, voice technology aligns with the industry's core values of quality and service, and even brings them to fruition. With a hands-free user interface, consumers do not have to lift a finger to get what they want. Beyond an immeasurable amount of convenience, voice technology takes the best of both worlds, offering exceptional customer service without infringing on privacy. Penetrating every inch of space where human presence would be intrusive, voice technology allows luxury marketers to master the formula of a shadow butler.

Marriott's take on voice technology can be easily transplanted into a broader context. In cars, in stores, or even at home - wherever a voice-enabled device exists, a personal assistant is available anywhere and anytime to provide an automated luxury experience. Picture this: Siri, where can I buy Adidas's adicross shoes? or Alexa, what's the best luxury furniture for a rococo-style apartment? or OK Google, book me



## *the shadow butler: luxury industry*

the best deal for Marriott Hotel in May. Whether it is product availability, recommendation, or purchase, marketers who make their brand available through voice channels can reach out to consumers who are on the go. These voice-enabled assistants can transform the marketing experience from a distraction minefield into an unobtrusive, consumer-first lifestyle accompaniment.

To top it off, marketers can bring the luxury and comfort of a store assistant online, where the consumer simply makes the decision and Alexa will do the heavy lifting. Throw out the arduous process of in-store shopping and the click-heavy procedure of online shopping - consumers can enjoy the ultimate luxury experience in the comfort of their privacy. Essentially, voice technology gives luxury marketers an edge over their rivals by bringing the consumer back to the crux of why luxury is superior.

However, marketers have to keep in mind that despite vast improvements in voice recognition, minor errors still persist in untangling words from thick accents. Consumers may also exceed the scope of questions and commands that a voice assistant is designed to understand. Most of all, voice technology straddles the line between personal and detached, convenient and frustrating. Using a voice assistant can easily collapse a personal marketing outreach into a robotic encounter where the customer is not understood. The key to effectively weaponise voice technology lies in knowing when to deploy it. Ultimately, voice assistants are not meant to replace human interaction, but to plant the human touch where humans cannot reasonably reach.

## *interactive instructionals: consumer electronics*



47% of consumers with smart speakers conduct product search and research, while 32% compare product prices.

No other industry compares to consumer electronics when it comes to the importance of product reviews and tutorials in swaying the consumer's decision. Price, specifications, features - today's consumers delve into intensive research before committing to a purchase. With the rise of voice technology, such online research is increasingly diverted to voice-activated search: 47% of consumers with smart speakers conduct product search and research, while 32% compare product prices. How should marketers latch onto the persuasive power of such content, especially in a changing marketing landscape?

To begin with, marketers can explore the marketing potential of voice applications and skills. With Amazon's fuss-free Alexa Skills Kit, it is as simple as creating a voice app that answers any query about an upcoming product or about the company itself. Alternatively, marketers can also insert their brand into existing voice apps that review and compare products. Brand visibility will be heightened, alongside customer recall and retention.

As groundbreaking as it may seem, voice-activated FAQs and research are just basic functionalities of voice technology. For greater engagement, we can take a look at how LEGO has revamped its playing experience with the LEGO DUPLO Stories Skill. Users can command Alexa to give a story prompt that guides the child's playtime. As Alexa narrates in a cheerful voice, the user is invited to direct what happens next in the story. A straightforward story



## *the shadow butler: luxury industry*

of a farm cat wanting a fortress made from hay can spark hours' worth of imaginative play-acting on the grand stage of LEGO props and characters.

In another instance, food app SideChef offers an arsenal of narrated recipes, allowing users to follow along at every step of the way in the heat of cooking. A simple command of “next” or “back” gives users the freedom to adjust the pace of the tutorial without any disruption. With these voice features, users can experience a seamless flow in the kitchen, guided personally by an expert voice chef.

These interactive and instructional capabilities of voice technology will be a gamechanger in the realm of consumer electronics.

**Instead of scrolling through copious forum posts in hopes of chancing upon a relevant tutorial, consumers can simply ask Alexa.**

At every stage, consumers can interject relevant details to alter the trajectory of the tutorial without facing the hassle of looking up another tutorial. The hands-free experience keeps the consumer focused on the task at hand, be it a how-to or a quick-fix.



## *the shadow butler: luxury industry*

In a market where functionality is the key selling point; these product reviews and tutorials will be indispensable assets to the consumer electronics marketer. The hook lies in delightfully elucidated promises of an excellent user experience. Beyond these immediate advantages, voice technology can also cater to an oft-neglected segment of the customer base. The intuitive user interface that demands no visual competence forges voice technology as a powerful marketing tool that simplifies electronics for the elderly and empowers people with disabilities. For the disadvantaged customer segments, voice technology is a lifeline that can help guide their purchase decision.

Despite the numerous advantages of voice technology, it is undeniable that a picture is worth a thousand words. The allure of consumer electronics

products is more easily translated across a visual interface than a verbal interface. A visual how-to demonstration is also much more digestible than a verbal spew of complex directions. In using voice technology, marketers have to master the balance between clarity and appeal within the constraints of a lean communication medium. Another limitation to voice technology lies in the fact that reading speed far outpaces speaking speed. Users are unable to skim or skip ahead to the important points. However, once voice-enabled machines are equipped with speed adjusting options, this limitation is no longer a barrier of entry to consumers.



## *grasp the voice: enterprise software*

# 68

## NEW CUSTOMERS PER MONTH

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Efinancial saw improved prospect-to-customer conversion rate, which boosted annual revenue by over half a million dollars.

Most B2B marketers are all too familiar with the painstaking chase of generating leads, nudging out nuggets of information from them, nurturing and engaging them, only to see them slip away. Repeat the process by a thousand times, and soon marketers are surrounded by a graveyard of abandoned leads, with wasted time and costs left on hand. How can marketers in enterprise software cut down on wasted resources and optimise their marketing strategy for more effective outcomes?

The short answer: capitalise on voice analytics for lead qualification and nurturing. Using algorithms, voice analytics is a powerful tool that accurately identifies mood and intent from prosodic features such as pitch, stress, and tempo. Marketers can use these insights to quickly evaluate lead quality and produce a strategy that optimises conversion. To be clear, voice analytics is different from speech analytics, a related strategy that analyses language nuances instead of acoustic cadences.

For instance, life insurance company Efinancial faced a similar issue illustrated above: reps had to field calls to and from potential leads, using their own judgement to qualify them as worth pursuing or otherwise. To ensure that leads were correctly qualified, the company had manually reviewed a small sample of calls. This resulted in a time-consuming process that left Efinancial none the



## *grasp the voice: enterprise software*

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*The effectiveness relied not only on the analysis of the customer's speech but also on the analytic supervision of the rep's performance.*

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Wiser about the accuracy of their lead qualification. With speech analytics, the company could analyse the customer's true intent, equipping reps with a solid framework to guide lead qualification. The result? Efinancial saw improved prospect-to-customer conversion rate, which boosted annual revenue by over half a million dollars.

Although Efinancial made use of speech analytics, their success highlighted pertinent points for the use of voice analytics as well. The effectiveness relied not only on the analysis of the customer's speech but also on the analytic supervision of the rep's performance. This two-sided analysis paved way for more comprehensive insights into key indicators of the customer's attitude and receptivity, as well as types of effective strategies that the reps could use. In the same vein, voice analytics can be used by enterprise software marketers to track the warmth of the leads, assess the effectiveness of marketing strategies, and tweak accordingly. Moreover, voice analytics captures a greater amount of detail in real time, including demographics, for marketers to tap on in nurturing and retargeting strategies.



## *automated voice engagement*

But why stop short of letting voice technology do all the work for you? Beyond insights, voice technology can automate the tedious process of customer interaction. Take a look at how IT service firm Securis enlisted the use of voicebots to supplement their call outreach. These voicebots essentially served as an army of virtual agents that interacted with prospective leads during the initial stages. With automation, the hefty process of qualifying leads, mining lead information, setting appointments, and scheduling demos became a breeze. Instead, reps can channel their time and energy into nurturing leads in the later stages, optimising all chances of securing a deal. In saving 20 hours of selling time a week,

**voice technology allowed the firm to engage with a greater number of prospects while simultaneously pursuing the most qualified leads.**

Combining voice analytics with voice bots, marketers will be equipped with a deadly weapon that hones the B2B marketing process on all fronts.

Of course, it is not all smooth sailing. The biggest stumbling block faced by marketers in enterprise software would be training the custom algorithms required for a killer voice analytics or voicebot. Noise in data may mislead algorithm, or algorithm optimisation may not achieve optimal accuracy soon enough, if not at all. However, by recruiting firms with AI expertise for help in building custom tools, marketers can access voice technology at their fingertips.



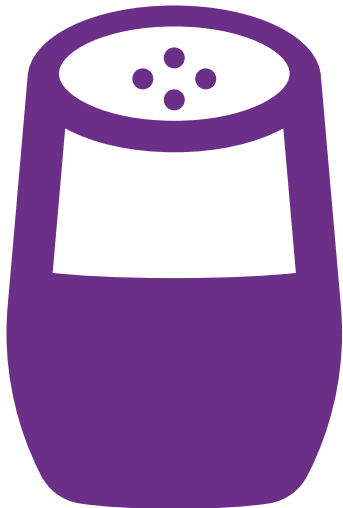
## *why is 2019 the year for voice technology?*

**27%**  
OF THE WORLD USES  
VOICE SEARCH ON  
MOBILE

From the introduction of Siri in 2011 to the eruption of voice-activated devices in recent years, voice technology has come a long way from its clunky predecessors. Just this year, Google demonstrated how Google Duplex, a virtual assistant, had managed to book an appointment by phone, using a computer-generated voice that was virtually indistinguishable from a real human voice. The vast leaps in performance signal that voice technology is market-ready, primed to reshape the consumer landscape.

Currently, 27% of the world use voice search on mobile, an affirmation that the voice technology is on the rise and set to be ubiquitous by 2019. As more consumers stream into the realm of voice technology, marketers need to follow suit to reach out to them. Backed by years of cumulative progress, 2019 is the opportune time for key players to establish a vocal presence in this new channel before it becomes flooded.

## *why in APAC?*



# 62%

OF SMARTPHONE USERS ARE  
CURRENTLY USING  
VOICE ACTIVATED TECHNOLOGY

An unexpected early adopter, APAC is leading the global boom in voice-activated technology. Statistics reveal that 62% of smartphone users in APAC are using voice technology, with China and India taking the lead. Amongst current users, 56% reported an increased usage over the past 6 months. Clearly, the allure of voice technology has captivated users. The bulk of APAC consumers are moving toward a new way of engaging with the online world, towards a blank sheet in terms of marketing. The integration of voice technology into current marketing strategies gives leeway for brands to make their mark where it counts. With a burgeoning cluster of voice technology users primed for targeting in APAC, marketers can surge ahead of competitors and gain the first advantage. In APAC, marketers will experience the tangible benefits of using voice technology first-hand.



## *what do you stand to gain?*

The slim user interface of voice technology offers a broad spectrum of marketing uses, from back-end applications in lead qualification to front-end applications in consumer engagement. The marketer that uses voice technology is a marketer that leverages on the full arsenal of marketing tools. By experimenting with different ways to integrate voice technology into strategies, you can master the art of voice even before latecomers join the game.

Instead of the diffused, indirect marketing strategies involved in today's digitised climate, marketers can revive the possibility of direct communication in a post-phone era. Your digital strategies are no longer chained to the confines of a device screen, nor delegated to the realm of online surfing. Be it a kitchen, office, or even a bathroom, your reach expands beyond online and offline public spaces to connect with consumers in their moment of need. Voice-first marketing is customer-first marketing.

**With voice technology, the marketer can turn a cold call into a love call that snags the consumer's heart.**

## *what's next?*

### THE NEW MARKETING CHALLENGE

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*In coming years, marketers need to optimise web content for voice-based search, or run the risk of becoming invisible in the realm of voice search.*

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The global move towards voice-activated search is a harbinger of brewing storms ahead for marketers across all industries. Just as the dust from the havoc of digital marketing settles, the mainstream entry of voice technology will once again disrupt the marketing terrain.

The DNA of written language is vastly different from spoken word. With a user interface that is more natural, consumers use voice search as if they are asking another person. For some marketers, they might make an instant connection to long-tailed keywords. Yet, the conversational nature of voice search terms is fundamentally distinct from long-tailed keywords, which do not necessarily sound natural when spoken aloud.

This change in search behaviour will signal another turbulent time, especially for those who have only just cracked the enigma of search engine optimisation (SEO). In coming years, marketers need to optimise web content for voice-based search, or run the risk of becoming invisible in the realm of voice search.

## *what's next?*

### THE COURSE OF ACTION

APPROXIMATELY  
**75%**  
OF VOICE SEARCH  
RESULTS RANK IN  
THE TOP 3 FOR  
THAT QUERY.

For most marketers, SEO for voice search is uncharted territory. To gain an edge over other brands, there is a need to understand the anatomy of voice search - how it functions and how users interact with it. Whenever users ask a question, voice search will return an answer that is extracted from a voice search result page. With smartphones, users can still access the text search result page, but with smart speakers, the visual interface is completely removed from the user experience and only the top result will be read. In voice search, top rank is crucial.

Unsurprisingly, pages that rank highly on text searches are more likely to appear as the result for a voice search. But marketers cannot simply optimise for text search and call it a day. Because unlike text search results, few voice search results contain the exact search keyword in its title tag. In other words, the voice search algorithm does not place as much emphasis on title tag as the text search algorithm does. Instead, the algorithm scans the entire page for content that matches the intent of the voice query. To maximise the chances of matching as many voice queries as possible, marketers should create in-depth content that answers multiple queries in a single page.

## *what's next?*

### THE NEW MARKETING CHALLENGE

For reference, the word count of a voice search result page averages out to a hefty sum of 2312 words. To consistently churn out valuable content that hits above the 2000-word mark may be a struggle. A quick solution? FAQ pages. Voice search answers are more likely to be taken from FAQ pages, simply because its format closely matches the way people use voice search.

To nail the nitty-gritty details of how a voice-optimised page should look like, marketers should keep sentences concise. In fact, the average word count of a voice search answer is only 29 words. In addition to word count, Google's Search Speech Guidelines has outlined formulation and elocution as factors in speech quality. Within a span of 29 words, marketers face a tall order of ensuring that their content is well-structured and aurally comprehensible, on top of matching the intent of the voice query.

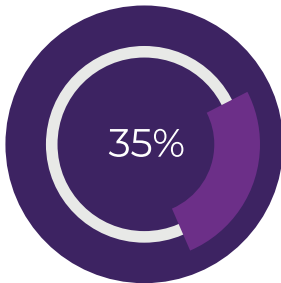
Marketers should also make the most of Google's Featured Snippets.

**With 40.7% of all search results appearing as a Featured Snippet as well, optimising for Featured Snippets is paramount to optimising for voice search.**

Appear on the Featured Snippet, and the top spot for voice search is essentially secured. There are resources available online for Featured Snippet optimisation, which shares overlapping strategies and steps with voice SEO due to the nature of a Featured Snippet.

## *what's next?*

### THE COURSE OF ACTION



35% Uses voice search when driving as opposed to typing

Voice search is also much more location-specific than text search. With the majority of consumers using voice search on the go, it is no surprise if location plays a more active role in the voice search algorithm than in the text search algorithm. In using voice search, “what are the best restaurants for lunch” may turn out vastly different results if the user is at home instead of at work. Marketers need to account for the importance of location in dictating first place ranking in voice search. To overcome the peril of invisibility, location markers are essential.

Armed with this knowledge on the anatomy of voice search, marketers can begin with the first phase of voice SEO: keyword research. First, consider who is your target audience. Consider what you are offering to them, as well as what they are likely to look up using voice search.

**The aim of keyword research is no longer about matching keyword, but about matching intent.**

Once you have identified the intentions of your target audience, it will act as your base keywords to generate long-tailed keywords using any SEO tool. These long-tailed keywords will be used to derive natural queries. The process is as simple as transforming the keywords into its question format, such as from “best restaurants for lunch” to “what are the best restaurants for lunch”.



## *what's next?*

### THE COURSE OF ACTION

Ramp it up further by brainstorming alternative ways of asking the same-intent query, such as “recommend me the best lunch places” “where to get the yummiest food for lunch”. These natural query keywords will form one set of same-intent keywords. Use them as the framework for what to include in your content and start writing. Remember to optimise your content for location as well, by including location markers.

To produce lengthy content, marketers cannot rely on just one set of keywords. Instead, one page should be accessible from a diverse array of keywords. To increase all possible paths that converge to your page, look for related search queries that have a different intent. Enter a natural query keyword from your first set of keywords into Google, and

**take a look at the “people also ask” box for inspiration.**

Using these questions, repeat the above process of generating natural query keywords. By following this process, you will end up with a contentful page that can rank for multiple voice queries.



## *what's next?*

### FIRST MOVER'S ADVANTAGE

#### **In voice-based search, first page no longer matters.**

First place does. Voice technology flatten the user interface, transforming a scrollable trove of search results into quick soundbites. For the consumer, there is little leeway (or even need) to access the information beyond what is presented to them, especially on a smart speaker. With stiffer competition in search rankings, invisibility in voice search is more punishing than in text search.

Then, whoever uncovers the secret riddling SEO for voice search first, will master the art of intent-based marketing. In truly understanding the customer, the first mover is able to cover all bases, penetrating every possible channel to heighten brand awareness. The advantage lies in this: cement your place in top result for voice search before it becomes impossible to break through the stronghold of future-ready players.

## *what's next?*

### ARE YOU READY TO GO IN?

#### TIME TO FIRST BYTE



VOICE SEARCH  
0.54 S



AVERAGE WEBPAGE  
2.10 S

Before you rush headlong into voice SEO, check that you meet the requirements that will give you a fighting chance. For a first, while loading speed and HTTPS give pages a boost in text search, statistics reveal that these factors play an even more prominent role in the voice search algorithm. The average loading speed of a voice search result is found to be much faster a typical webpage, and the percentage of voice search results with an HTTPS-secured URL is much higher than that of text search results. The takeaway? Ramp up your page loading speed and make the switch to HTTPS before you even begin SEO for voice search.

Since location also plays a greater part in voice search as well, marketers also have to ensure that the page is already optimised for local search, before optimising for voice search. Marketers will have their work cut out for them, starting from listing your brand in Google My Business, to boosting the number of online reviews, and even to ranking on Google's Local 3-Pack.



## *what's next?*

### ARE YOU READY TO GO IN?

Next, to help search engines crawl your pages better, marketers should also take the time to mark up pages with structured data. As with loading speed, structured data markup already helps boost search rankings in text search. However, it is also equally important in voice search, especially since markup also helps with ranking for Google's Featured Snippets and Local 3-Pack.

Yet the biggest challenge of all lies in this: establishing domain authority. For any business lacking domain authority, you might very well forget about ranking on voice search. Research has found that average domain rating of voice search results stood at 76.8, much higher than the average page rating. This indicates that the voice search algorithm may place more emphasis to domain authority than to page authority. The prominence of domain authority is unsurprising, considering that Google needs a quick way to ensure that the given voice answer is accurate.

**Once you have these basics down, you can enter the race to the top of voice search, well-equipped for greater success.**



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