

Do androids dream of electric consumers? Ethical considerations at the intersection of AI, creativity and marketing

Oliver Feldwick

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As non-human actors that think fundamentally unlike us, are being asked to make decisions and take actions that affect us, there are very valid concerns around possible negative or unintended impacts of AI.

- AI influences a whole host of marketing activity and these little nudges and moments quickly add up to shape and influence the world around us in multiple ways, for example, Netflix algorithms can affect if we are happy or sad based on what it recommends next.
- Four common pitfalls we should be wary of include: unfair advantage, unconscious bias, unintended consequences and unethical usage.
- Steps that can be taken to avoid these pitfalls are: having humans and machines working together, ensuring diversity of data, teams and thought, building safeguards, explainability and a 'killswitch', and engaging design ethicists alongside algorithm design experts.
- Each company should have a clear point of view on appropriate use of data, machine learning, targeting and dynamic creative in their working practices, which minimises potential fall-out and is also the right thing to do.

Data ethics

This article is part of a series of articles on data ethics. [Read more](#).

Need to know

- Artificial Intelligence (AI) is a game changing technology and has an undeniable impact on ethics, as it introduces a non-human actor to decision making processes

- This has a complex impact on marketing due to the nuances of creativity, persuasion and AI
- Valid concerns around possible negative or unintended impacts of AI and marketing should be explored sooner rather than later
- AI is underpinning more and more marketing activity, contributing many little nudges and moments that influence the world around us in not insignificant ways i.e. what we watch, read, eat, listen to, buy and how and what we learn about the world
- There are three useful questions we should ask ourselves for ethical decision making in relation to AI and marketing: 1. Agency – who is responsible? 2. Intent – what did they want to do? 3. Outcomes: what actually happened?
- There are four common concerns or challenges marketers face regarding AI ethics, each discussed in detail below: Unfair advantage, unconscious bias, unintended consequences, unethical usage
- Addressing these issues matters because we can have a lot of insidious and potentially unethical targeting and optimisation decisions happening without us even realising. From systems that accidentally target vulnerable individuals (such as with gambling) to marketing which is simply sub-optimal because of a problem in the underlying data
- There are some key principles that can minimise risks. Humans and machines should work together but ultimately, humans should act as the supermanager – in control of the system
- Having a diversity of data, teams and thought will ensure a range of voices are in the room, who aren't all drinking the same Kool-Aid
- Building in safeguards and a 'killswitch' is something AI developers and marketers should be conscious of. It involves a 'pre-mortem' exercise, wherein you imagine all the ways it could go catastrophically wrong, and plan to guard against
- Engage design ethicists and algorithm design experts – every company should have a clear point of view on appropriate use of data, machine learning, targeting and dynamic creative in their working practices
- As AI advances, we must properly examine who has agency so that we can apportion credit or blame. If an AI breaks the rules, who is at fault? The original developer? The user of the tool? Or the AI itself? The legal status of non-human entities is complex but must be addressed
- If creativity is being done by a machine it can move from persuasion to manipulation and so creativity becomes cynical. This raises the question: if marketing represents one of the major creative outputs we see in culture, what does it mean for humanity if an increasing proportion of it is generated by machine?
- If we become mere caretakers for machines that dictate what we watch, what we buy, what we listen to; the music we hear, write the plots for the TV that we watch. What then?
- It's time to take algorithm design and design ethics seriously. Each company should have a clear point of view on appropriate use of data, machine learning, targeting and dynamic creative in their working practices. This is sensible business practice that minimises potential fall-out, but is also the right thing to do.

Marketing is rife with difficult ethical decisions

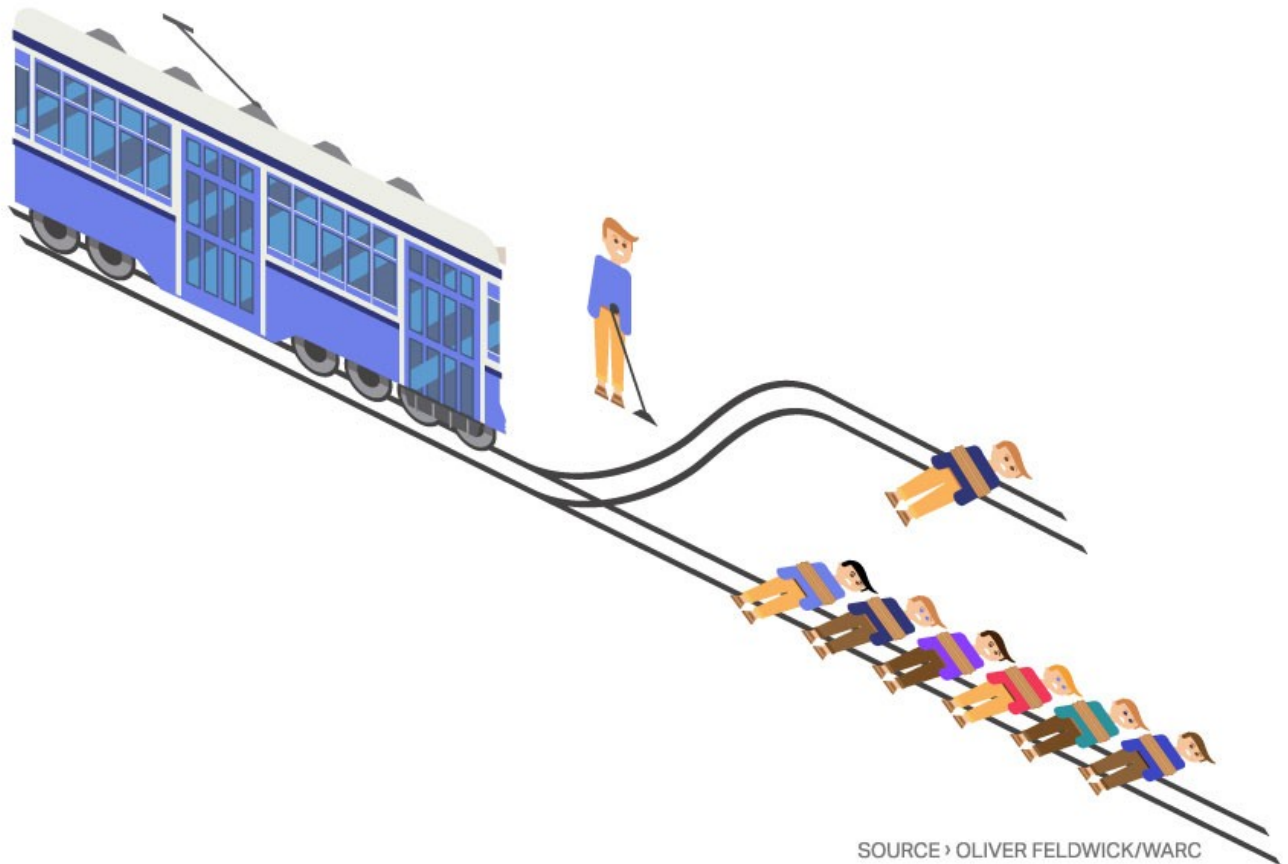
Ethics should play a much larger role in marketing than it does. It sits behind everything we do. Operating at the intersection between business, human decision making, and creativity, we should continually be examining our impact on the world.

As Rory Sutherland puts it "Marketing raises enormous ethical questions everyday – at least it does if you are doing it right."

But we tend to not go into it. Probably because it's difficult. Luckily, millennia of philosophical pondering has given us some useful tools to explore ethical dilemmas.

For example, the Trolley Problem is a common thought experiment to illuminate the ethics of utilitarianism (the philosophy that the ethically right action is to maximise 'good/utility' or minimise 'harm'). In this dilemma, you are standing at a train intersection. A runaway train trolley is coming down the track. If you leave it on the current track and do nothing it will hit five people. As the illustration below shows, if you flip the switch it will divert to another track hitting one person. Is it ethically okay to actively step in and kill one person, to prevent a greater loss?

The trolley dilemma



SOURCE › OLIVER FELDWICK/WARC

First year philosophy pub conversations tend to then make the dilemma more spicy. What if that one person is a member of your family? Or if the five people are all in their eighties while the one person is a teenager, with a whole life ahead of them? Or the one person is a world leading cancer specialist on the edge of a breakthrough that could save millions?

These thought experiments are designed to unpack and illuminate difficult ethical concepts, helping us apply ethics to everyday situations.

AI raises the stakes as the thought experiments become real

Science Fiction is full of similar thought experiment dilemmas. In 2001: A Space Odyssey, HAL holds the crew captive and ultimately tries to kill them for the sake of the mission. To survive, they must 'kill' HAL. In Blade Runner, the test for replicants is whether they can react with the appropriate levels of empathy, however as they increase in sophistication, they blur the line becoming indistinguishable and we are forced to question whether they are moral agents in their own right (and whether humans' treatment of them is ethical).

These stories are compelling because the evolution of AI forces us to look at previously unexamined parts of human life. A feature of AI is that it doesn't operate like a human. It doesn't get tired or distracted. It doesn't suffer from subjectivity. It doesn't approach things with the same thought processes or mindsets. It can solve problems in ways that humans can't fully comprehend.

This is where ethics comes into it. As non-human actors that think fundamentally unlike us, are being asked to make decisions and take actions that affect us, there are very valid concerns around possible negative or unintended impacts of AI. The cautionary tales of our science fiction could be becoming science fact.

One of the challenges with such game changing technologies, is that by the time things get bad, it can often be too late. Which is why we should be asking serious, probing questions sooner rather than later.

Was HAL immoral in choosing to kill the crew? Or was it acting ethically trying to follow its interpretation of its original coding? And by proxy, did the programmer of HAL do something unethical and should they be held responsible? Indeed, did the crew break a moral code by killing a sentient computer just because they had differently aligned objectives?

AI and autonomous driving now means the previous Trolley Problem is a very live debate. A self-driving car needs to decide between steering left to avoid a person but potentially hit others. Who should it choose? What data should it infer from? Should it be able to quickly scan the faces of the people, run them against a police database and see their records? Or their social media profile and use that to see if they have dependants? Should it favour drivers or pedestrians? How would you feel if you knew your self-driving car was programmed to kill you to save others? How about if you developed a 'defensive driving module' that you paid extra for but increased your safety as a driver?

Tiny algorithmic nudges add up to big ethical challenges

While in marketing we aren't talking about such stark life or death scenarios, it still matters. AI influences a whole host of marketing activity, such as:

- The ads our programmatic systems choose to show
- The creative tweaks our optimisation engine does
- Image and video generation and short form copywriting
- Voice recognition and chat interfaces
- "Next Best Action" recommendations

These little nudges and moments quickly add up to shape and influence the world around us in multiple ways, for example:

- Netflix algorithms can affect if we are happy or sad based on what it recommends next
- Facebook algorithms can affect if we become more extreme or moderate in our views
- Amazon Fresh algorithms can affect if we become more or less healthy in our eating
- Google Search results can affect how we see the world by what we're exposed to

The components of ethical decision making

There are three useful components for looking at ethics in marketing. The 'agency/author' of the decision, the 'intent' that goes into it, and the 'outcomes' that it creates.

Three useful components when addressing ethical implications of AI for marketing

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SOURCE › OLIVER FELDWICK

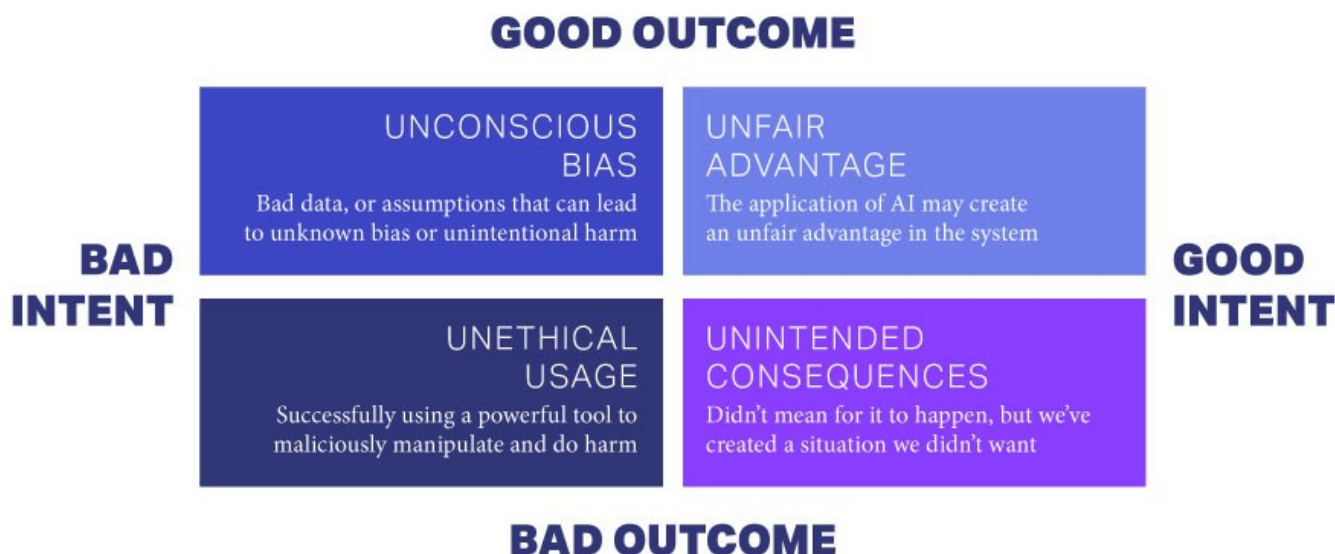
Each component raises slightly different questions.

- With the 'agency/author' we should ask ourselves who is creating, who is responsible, who is at fault?
- With the 'intent' we should look at the data and processes the decision is being made on
- With 'outcomes' we should look at whether it is working as intended and the net result of the action

In short; who did it? What did they want to do? What actually happened?

Four common pitfalls we should be wary of

Looking at intent and outcome gives us a framework for different ethical risks and how we should guard against them. If we map these into four quadrants, we get to some of the common concerns or challenges we could face regarding AI ethics.



SOURCE › OLIVER FELDWICK

1. Unfair advantage – does even appropriate use of AI in marketing skew the game in an unethical way?

While it might feel counter-intuitive, even ostensibly successful uses of AI can raise serious challenges. It can allow unfair competitive advantages and monopolistic behaviours. The AI Lock-in data advantage can create unassailable market dominance and requires guarding against.

But on a broader level, it can also escalate and skew the balance in marketing. Marketing is based on a balanced, implicit contract between media owners' ability to monetise attention, brands' ability to buy and use it, and consumers' right to have their attention respected and rewarded. If AI provides a major advantage to one of those forces it can distort the balance.

Perhaps we'd end up with each different brand optimising their campaigns against each other, and each consumer using their own ad-blocker AI to defend against it. It seems unsustainable or undesirable for everyone to need their own AI systems, defending themselves against the others.

2. Unconscious bias – how do we ensure that even seemingly working systems aren't based on unethical data, premises or bias?

There are several examples of this in action, where unforeseen problems in the dataset skew the algorithm. For example, researchers developed a tool to catch early onset Alzheimers with 90% accuracy. The catch was that it only worked on the specific French-Canadian accent in the area it was developed. There are many other similar examples in the press – from racial bias in recognition software, or parole prediction software, to gender bias in voice recognition or hiring algorithms.

This unintended bias is only spotted through careful observation and investigation. The risk, of course, being that a lot of other incidents of it go unnoticed.

Even specifically defining algorithms to not take discriminatory data into consideration, it can use other data

points as a proxy for the same discrimination (e.g. you specify it to not look at gender, but then it uses height as a proxy for gender).

This matters, because we can have a lot of insidious and potentially unethical targeting and optimisation decisions happening without us even realising. From systems that accidentally target vulnerable individuals (such as with gambling) to marketing which is simply sub-optimal because of a problem in the underlying data.

3. Unintended consequences – how do we ensure well-intentioned systems don't lead to unintended and undesirable consequences?

Even if the premises and inputs into the system are all working, it can still end up with unintuitive, unexpected and ultimately unintended consequences. This is because the algorithm does not have any innate common sense. It doesn't understand the broader context or assumptions we might take for granted.

A common thought experiment for this in AI circles is the Spoon Factory. Imagine a spoon factory whose production you turn over to an AI tasked with optimising spoon production. However, given this blunt objective, it could decide to do this by flouting health and safety regulations, by pushing workers' rights, by sacrificing profitability to maximise productivity. Once your AI Spoon Assistant has fired all your workers and run your company into the ground to squeeze out a bit more productivity, it's too late to point out that wasn't exactly what you meant.

A similar analogy can be found in marketing, with fake news or clickbait. Creating a system that is designed to optimise around time on platform, or engagement rates, the incentives have accidentally reshaped the whole machine to prioritise outrage, to prey on insecurity and use deceitful tactics to hit those targets. On one level the system is working as intended. But on another, most people can agree that the current opaque digital marketing landscape is not working optimally.

4. Unethical usage – where do we draw the line and how do we defend against downright unethical or reckless use of AI?

Lastly, the most obvious misuse of AI is that where it's being used by a malicious individual for a malicious end. Be that profit, mischief, or political ends.

This is already happening in the realm of bot networks, ad fraud, fake news and spam marketing. There's an ongoing battle between good and bad actors. (Google's spam filters have reduced spam email to a minor annoyance, rather than a daily onslaught for example). But beyond criminal activity, there is plenty of scope to optimise unethically, preying on insecurities, spreading disinformation, targeting vulnerable audiences.

This is tricky to prevent (beyond simply imploring people to not be evil). But regulation, transparency and industry oversight are critical to minimise its impact and harm.

Some steps we can take to avoid the pitfalls

Even unpacking the problems we face in AI and marketing ethics, can be complex. A spectrum of potential pitfalls mean it's not a simple task to resolve. However, there are some key principles that can minimise the risks.

1. Humans and machines working side-by-side
2. Ensure a diversity of data, teams and thought
3. Build in safeguards, explainability and a 'killswitch'
4. Engage design ethicists and algorithm design experts

Firstly, having humans and machines working together can help keep things on track. Unless it's a clearly and safely defined system, having a human provide common sense guidance is invaluable. This should be an oversight and augment role – if the machine is able to do 90% of the task, the human can focus on checking the output, and making sure the final 10% works. Humans should be acting as the supermanager of the system, not just handing over control to the machine.

Secondly, the greater the diversity working on the problem the better. Building a system around a single metric or dataset (such as a clickthrough) or building an industry around a monoculture (a problem Silicon Valley is often accused of) can both lead to bias and unintended consequences. This means a diversity of datasets which can help identify or dilute bias. It also means a diversity of individuals to ramp up the human safeguard, from both a conventional diversity point of view but also from a diversity of thought and opinions. It means ensuring a range of voices are in the room, who aren't all drinking the same Kool-Aid.

In terms of building in safeguards, this is something both AI developers and marketers should be conscious of. This requires working through the scenarios and thinking the worst. A 'pre-mortem' exercise, wherein you imagine all the ways it could go catastrophically wrong, can help outline potential pitfalls to guard against. This can help when designing these systems but also figuring out what to look out for.

Another key component in technical algorithm design is explainability. This is a requirement of GDPR (and GDPR also does a good job of litigating against a lot of the unconscious and unintended downsides of algorithms and AI in marketing), but is also good practice. Being able to look inside the black box and check its decisions is critical. Furthermore, providers should build safeguards against people misusing marketing tech; monitoring use and building in a killswitch that disables features if they are being used in problematic ways.

Lastly, all of this can only be consistently done if we start taking algorithm design and design ethics seriously. Each company should have a clear point of view on appropriate use of data, machine learning, targeting and dynamic creative in their working practices. This is sensible business practice that minimises potential fall-out, but is also the right thing to do. We likely have a skills gap of people who are both able to understand the systems we are building and have the frameworks to see how they are applied ethically.

Taken together, these steps can minimise and prevent some of the worst ethical misuses. At the end of the day, there will be continual challenges and concerns, but that shouldn't be taken as a reason to not develop a new technology.

The human-AI dividing line

Having looked at the intent and outcomes of AI in marketing and creativity, there is a further consideration – that of agency or authorship.

Agency is important on quite a functional basis – that of apportioning credit or blame. If an AI breaks the rules, who is to blame? The original developer? The user of the tool? Or the AI itself? The legal status of non-human entities is complex (there's an eccentric history of humans trying to find animals guilty of crimes through the

ages). But as AI usage grows, it's one we must properly examine.

It is also where we get a bit more broadly philosophical. Many people recoil in horror at the idea that an AI or 'machine' can come up with higher level 'creativity'. People are happy for it to do their taxes, to diagnose diseases, to manage logistics, to optimise databases. But the idea that it could create art, write a symphony, or tell a story, causes some visceral reactions and soul searching.

There's a thought experiment around forgeries. You find a painting for sale in a gallery. You love it, it moves you deeply, you buy it for £5000 and put it on your wall at home. You get daily enjoyment out of it. Years later you discover it a forgery. How does your relationship with it change? Does it diminish your previous enjoyment? And your future enjoyment?

We see a similar effect around AI generated creativity. This is because we place some kind of higher importance on creativity and art. The sense that we are capturing some human truth, or experiencing some connection with another thinking being.

Humans persuade, computers manipulate

This is particularly interesting in marketing, where creativity is used to be persuasive. It is accepted that human creativity can be persuasive – it can seduce, it can entice, it can flatter, it can excite. However, if it is being done by a machine that somehow changes. It moves from persuasion to manipulation. Creativity becomes cynical.

Rightly or wrongly, this is a common reaction and one that we must understand. If marketing represents one of the major creative outputs we see in culture, what does it mean for humanity if an increasing proportion of it is generated by machine?

This last area is, perhaps, why so many creative individuals reject the notion of creative AI. Humanity is facing, or even creating, its own usurping. We are designing tools that are better than us in almost every regard. Which forces us to confront an underlying existential question of what it means to be human.

Few know this better than Garry Kasparov. Having been absolutely at the top of human intelligence as a Chess Grandmaster, his painstakingly developed skill was eclipsed by Deep Blue in the 90s. In his book *Deep Thinking* he talks about the introspection and challenge he faced, redefining his sense of purpose.

Once a machine can write better copy than us, can edit films faster and better than us, has a better eye for detail than us, we need to question what it is that makes us human, and ultimately what the point in anything is?

If we become mere caretakers for machines that dictate what we watch, what we buy, what we listen to; that design the art on our walls, create the music we hear, write the plots for the TV that we watch. What then?

It's a big question, but now is the time to start grappling with it.

Time to take ethics seriously

Looking at AI ethics is not a simple topic. While marketing uses will be lower stakes than others, they are also more complex due to the nuances of creativity, persuasion and AI.

In the words of HAL, “This mission is too important for me to allow you to jeopardize it.” We can’t afford to just wait and see. But the good news is, that building in the right safeguards, diversity and frameworks into everything we do, we can shape the landscape for the better.

About the author

Oliver Feldwick
Global Head of Innovation, The&Partnership

Since joining in 2014, Oliver has worked across the business on strategy, innovation and creativity.

He’s interested in technology and its impact on marketing.

He won the Admap essay prize in 2016 with “The Uncanny Valley of Personalisation”, obtained a distinction in the IPA Excellence Diploma with “Unleashing Cyborg Creativity” and presented at conferences on a range of topics.

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