HUMAN

SEE MORE, WIN MORE

WHY SCALE MATTERS AND HOW THE HUMAN DEFENSE PLATFORM USES ITS VISIBILITY ADVANTAGE TO PROTECT ENTERPRISES

INTRODUCTION

When HUMAN (then White Ops) began in 2012, the founders' central idea was rooted in safeguarding the integrity of the internet to do good. Back then, even though bots were rampant on the web, bot mitigation solutions were still in their infancy. Cybercriminals were, and still very much are, cashing in on ad fraud to fund criminal activities. Because the risk of getting caught was so low and the payout potential so high it was an area that HUMAN decided to do something about to disrupt and stop bad actors.

Programmatic advertising is one of the dominant forms of digital advertising available today across many platforms. And with the scale of programmatic advertising reaching trillions of bid requests a day, getting a grip there would form a strong foundation for building a massive sensor network that could inform fraud decisions across the entire internet.
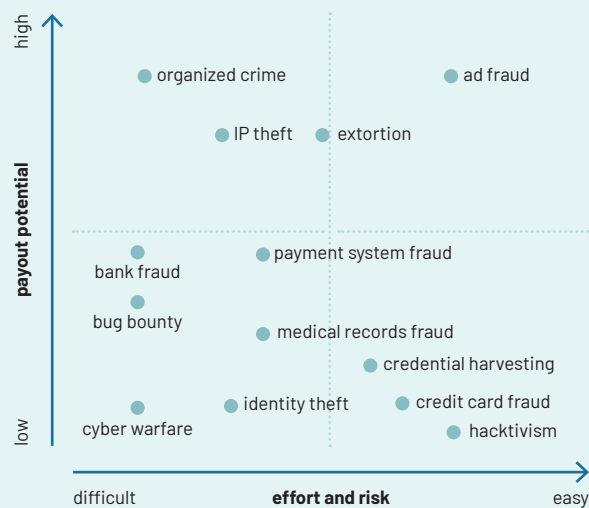

Figure 1: Attractiveness of hacking based on financial gain and effort
Source: The Business of Hacking, Hewlett Packard, 2016

"In the beginning, the internet was created. This had made many people very angry and has been widely regarded as a bad move."

- with apologies to Douglas Adams

The internet is powered by digital advertising — it's the bankroll that allows news organizations to send reporters to every corner of the world in search of a story, the cash flow that allows cooking-oriented companies to build new and exciting recipes, and the mechanism that allows your favorite streaming music service to bring you the most obscure tracks you've ever uncovered.

Every ad-powered website you visit is going through a bunch of live auctions between when you hit the enter button and when the page loads. Every ad on the page is up for bid – how much are advertisers and their technology partners willing to pay to put their ad in front of your eyeballs? The top bidder is chosen in a matter of milliseconds, and an ad is placed in the ad slot. That auction process is known as "programmatic advertising", and it's a dominant form of digital advertising on the web today, to the tune of trillions of bid requests in those auctions every day.

Today, HUMAN sees **85% of the impressions in the global programmatic advertising ecosystem** through MediaGuard. The Human Defense Platform processes the vast majority of all bid requests made on those ads on the web. We use more than 2,500 distinct signals to determine if a bid request or an impression is what it's supposed to be: both a human, and the right human or a malicious actor using automation — a bot.

Everywhere HUMAN's technology sits is another sensor in the global sensor network with more than **20 trillion interactions** observed each week. But HUMAN's technology isn't limited to digital advertising.
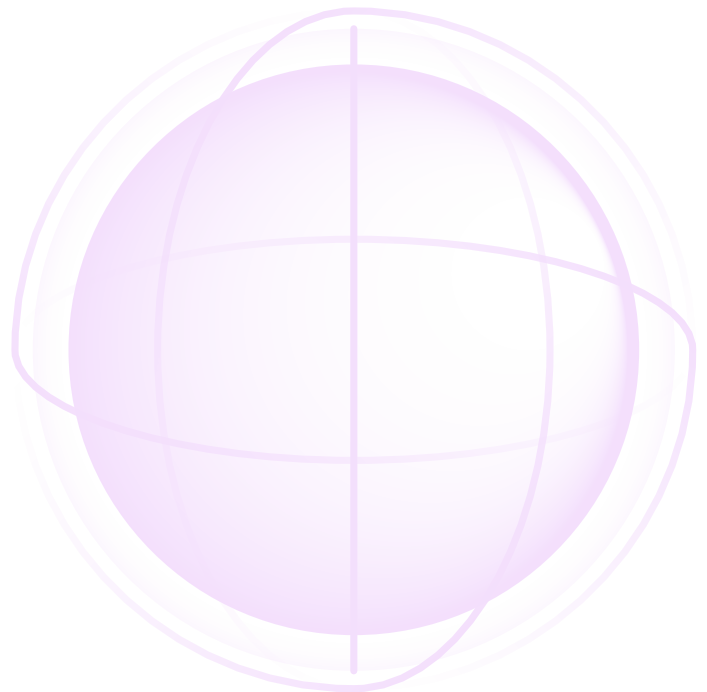
KEYS TO THE KINGDOM

It seems as though every time you turn around, there's news of another data breach. We've almost become numb to it at this point; "oh, millions of users of x or y websites have had their accounts compromised, we should all change our passwords." What's most disheartening about that cynicism is the scale — if these breaches weren't so big and so frequent, they'd resonate better.

What if, instead, that scale became a weapon of protection rather than a cudgel of defeat? That's the idea behind HUMAN's [Credential Intelligence](#) and [Account Defender](#) products.

Credential Intelligence provides active protection against the use of harvested credentials. Every breach simply arms the solution with even more information with which to spot and stop fraudulent activity before it can harm users. All of which feeds back into our sensor network.

And Account Defender safeguards web portals against compromised and fake accounts. After all, fraudsters aren't limited to breaking into existing accounts; they can just as easily spin up new accounts of their own and use those to perpetrate cybercrime. With Account Defender, new and existing accounts are protected not just at the point of login, but at all times thereafter.

IT'S THE CODE, STUPID

We've established that every ad protected by MediaGuard, every login protected by Credential Intelligence, and every account protected by Account Defender serve as sensors in HUMAN's global sensor network. But there's one piece left to the equation: the websites themselves.

HUMAN's [Code Defender](#) protects those websites on the client side, blocking any actions a script might take that a website owner wouldn't want, like capturing PII or credential combinations.

That in turn protects a website owner from Magecart-style attacks and third-party script-based attacks.

Every digital advertisement, every login, every account, and every website with HUMAN technology all form a massive global sensor network that sees more and protects more than any other organization. That visibility is what makes the Human Defense Platform so powerful: **every attack on any of our media or enterprise security customers becomes a new defense for all of our media and enterprise security customers**. After all, signs of automation and fraud are universal, they're not specific to media or enterprise use cases.

Battling fraud comes down to one thing — signals. A signal is a bit of technical data that tells the Human Defense Platform something about the bid request, impression, or device. The more of these little bits of data that you have at your disposal, the clearer picture you are able to paint of the humanity (or the correct humanity) of whatever is using the device.

Think of it like a Seurat painting — a collection of dots that only makes an image as you step away from the canvas. For the pointillist artist, more dots makes a clearer picture. The more signals that go into the models, the stronger the picture of potential fraud becomes. In a matter of milliseconds, our platform is digesting a history of bot intelligence to make key decisions on each impression before it can be bid on.

Seeing more than half of the internet population each month gives HUMAN a distinct advantage in defending our customers against digital attacks. The Human Defense Platform sees the whole ecosystem, not just one portion of it, allowing us to create a much clearer picture with our dots. The picture we can paint allows us to **better spot anomalies when they occur making it more difficult for cybercriminals to evade us**. Our picture allows us to **see new things faster and react quicker when cybercriminals do adapt**.

Part of the beauty of our Seurat is that we don't paint it by ourselves. We paint it with all of our clients: **every attack on any of our media or enterprise security customers becomes a new defense for all of our media and enterprise security customers**. We call this "collective protection", and it is how we put our visibility advantage to work.
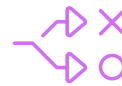
THE HUMAN VISIBILITY ADVANTAGE

STRONGER MODELS

MORE DIFFICULT FOR FOR CYBERCRIMINALS TO ADAPT

FASTER ANOMALY IDENTIFICATION

QUICKER REACTION TO THREATS

We see more, we know more and we can do more. The results? Our clients now play to win in the battle against fraud.

Visit **humansecurity.com/observability** to discover how you can take advantage of the power of HUMAN's visibility to start playing to win against fraud.

About Us

HUMAN is a cybersecurity company that safeguards 500+ customers from sophisticated bot attacks, fraud and account abuse. We leverage modern defense—internet visibility, network effect, and disruptions—to enable our customers to increase ROI and trust while decreasing end-user friction, data contamination, and cybersecurity exposure. Today we verify the humanity of more than 15 trillion interactions per week across advertising, marketing, e-commerce, government, education and enterprise security, putting us in a position to win against cybercriminals. Protect your digital business with HUMAN. To **Know Who's Real**, visit **www.humansecurity.com**.