THE VALUE OF VALUES

BUILDING BETTER DIGITAL EXPERIENCES WITH AI

Building powerful digital experiences.

As the Internet has evolved over the years, the task of creating dynamic and engaging digital experiences has become more complex and competitive than ever before.

Designing a website that offers a personalized, secure, and meaningful digital experience is the best way to win customers who are more engaged and ultimately, more likely to purchase something from you. But a failure to create these types of digital experiences today means losing those customers to your competition.

The ability to innovate quickly has always been a competitive advantage. In the past, the speed at which businesses were able to do things like quickly build a website or make it mobile responsive meant the difference between them and the other players in their industry or vertical.

Today, that same competitive charge is being led by the implementation of Artificial Intelligence (AI), and the way businesses are able to apply AI-driven solutions to build powerful, personalized digital experiences that resonate with younger, more demanding audiences online.

Even with privacy concerns at an all-time high, consumers are clamoring for digital experiences that provide them with individualized and relevant content delivered at the right time on their preferred devices in a way that protects their privacy. Companies and brands that are able to harness AI to build these types of personal digital experiences are simply winning more business and outpacing their competition.

But the AI ecosystem is expanding, rapidly. While it's still relatively new, this technology already has vast applications across many industries, and finding the right ways to plug it into the digital experiences you're providing without alienating customers isn't always a clear line from A to B.

In an effort to find out more about the elements of AI-powered digital experiences and the best ways to drive value with AI, WP Engine, in collaboration with Dr. Chris Brauer, Director of Innovation at Goldsmiths, University of London and his research team at Smoothmedia, conducted a comprehensive, international study aimed at investigating the role of AI in creating human digital experiences on the web. In this white paper, we will dive into those findings and explore their implications for today's marketers and business leaders.

What's inside.

Study results.

The AI race has already begun.

Not that long ago, the phrase *Artificial Intelligence* was more likely to be found in the pages of a science fiction novel than in a conference room or on a budget spreadsheet for the Fortune 500.

Fast-forward to the present, and practical applications of AI are springing up everywhere. From healthcare and entertainment to financial services and even the military, AI now has a foothold across many aspects of our daily lives.

According to industry analyst firm IDC, worldwide spending on AI systems is forecast to reach $35.8 billion in 2019, an increase of 44.0% over the amount spent in 2018. Spending on AI systems will more than double to $79.2 billion in 2022 with a compound annual growth rate (CAGR) of 38.0% over the 2018-2022 forecast period. In 2019, much of that spending will occur in the United States which is expected to account for nearly two-thirds of global spending on AI systems in 2019, led by the retail and banking industries.

Even though there are still numerous industries—and brands and agencies in particular— that have yet to take the AI plunge, our study found that a growing number of organizations are already reaping the benefits of AI-based solutions to improve their bottom line.

In fact, almost half (44.5%) of businesses today are already seeing a visible increase in sales volume through their use of AI. At this relatively early stage in the AI adoption curve, that statistic alone speaks to the deep potential this technology holds for businesses looking to differentiate themselves and pull away from their competitors.

When our study examined AI being used specifically to power digital experiences, it was even more impressive, with a staggering **93.5% of respondents already seeing a positive return on investment** for those same AI-driven solutions.

44.5%
OF BUSINESSES SEE A VISIBLE INCREASE IN SALES WITH AI

WPengine®

As an enterprise business or a digital agency that works with these digital experiences, the time has arrived for you to begin embracing AI-driven technology. In fact, according to our survey, you're already somewhat behind the curve. A surprising amount of businesses are already well on their way towards widespread AI implementation across their organizations, and if you think this is a passing fad, the numbers tell a different story.

For example, almost all (90%) businesses surveyed as part of our research plan to increase their use of AI in the coming year. Thirty-seven and a half percent of businesses plan to increase their AI budgets Significantly (by 50%-75%), while 61.5% of businesses are already investing more than $1 million a year in AI.

The potential the AI ecosystem holds is massive, and marketers have much to gain here. Nonetheless, there is also a hurdle that threatens to block AI's advance—consumer fear, uncertainty, and doubt about the full ramifications of AI, and the potentially sinister machinations of such powerful technology in the wrong hands. Our study found that those concerns could slow the adoption rates outlined above, and significantly hinder the success of AI-based tools in consumer-facing initiatives, unless those concerns are tempered by human discernment, and specifically ethics and values to serve as a guardrail for this powerful technology.

37.5% of businesses plan to increase their AI budgets Significantly (by 50%-75%), while 61.5% of businesses are already investing more than $1 million a year on AI.

WP engine

The need for a human element.

Before we go any further, it's worth pointing out that AI isn't completely overshadowed by uncertainty or fear. In fact, the overarching attitude towards AI remains generally positive—57.6% of survey respondents said they believe AI will ultimately have a positive impact on the world.

Nonetheless, many of those same respondents said they were worried about the far-reaching effects of AI, especially if its power goes unchecked. For example, 44.7% of respondents said they were concerned about inherent bias in AI that could cause an unequal representation of people of all ethnic backgrounds.

Indeed, questions surrounding bias in AI, the over-reliance on AI to make critical decisions, and the use and storage of personal data by AI-driven systems, all lend themselves to a creeping level of discomfort surrounding this technology.

Without instituting a way for AI-based systems to retain some type of balance—a level of human refinement—there is a risk that AI's full potential will be limited, particularly with regard to the relationship between consumers and brands. The ability to create the types of highly personalized digital experiences today's audiences demand is reliant on both

the amazing functionality of this new technology as well as a certain level of trust in those who deliver this technology.

For example, 51.8% of our survey respondents said they would happily share personal information with a website or app if they feel that it helps them get a better overall experience or better service in return. On the flip side, a massive segment (83.8%) of respondents said they believe brands should delete the "dark" data that was collected in that exchange, especially if it's not being used.

To truly harness the power of AI, there is a need to apply this advanced technology in a way that inspires consumer trust. Based on our research, this is best done by filtering a set of foundational values through each of the key aspects that make up successful digital experiences—personalization, data exchange, and meaning—so that businesses can set their own values around AI and get the most out of it.

57.6% of survey respondents said they believe AI will ultimately have a positive impact on the world.

WPengine®

The value of values.

Since the core issues of privacy, security, and trust dominate the conversation around AI and digital experiences, AI provides businesses with an opportunity to reimagine and redefine their organizational ethics and values.

Consumers realize the importance of these commitments, and if a business can ensure a secure space of privacy and trust, the options they have to offer incredible human-digital experiences become limitless.

The following sections discuss the value and the values of the three elements of digital experience: personalization, data exchange, and meaning, followed by recommendations for ways to cultivate consumer understanding of AI while building and delivering these experiences.

Personalization.

Creating digital experiences personalized to each user is perhaps the most important element for today's online audiences. Younger generations such as Gen Z, who are digitally fluent and raised on social media, have come to expect digital experiences that anticipate what they're looking for and create bespoke customer journeys based on their likes and wants.

AI is the fuel behind this level of personalization, and it allows businesses to better understand their customers and personalize content at scale. In doing so, businesses can build deeper relationships with their customers over time, cultivating consumer loyalty and higher-performing metrics: bottom line, revenue, growth, and repeat customers. Enterprises have long understood the importance of personalization, the proliferation of AI-based solutions has simply shifted it from an option or a "nice to have" to a prerequisite for success.

The role of AI in advancing this level of personalization at scale is continuously evolving and giving way to sleeker ways of ensuring things like accurate targeting occur based both on demographics and psychographics while ensuring a seamless user journey. Through our research, predictive personalization surfaced multiple times, which moves beyond previous iterations of rules-based personalization to understanding each customer and their patterns in-depth, ensuring that personalization is not an off-the-shelf solution but rather tailored to each user individually.

WP engine

The value of personalization.

Today's consumers are subjected to an unprecedented amount of information from a barrage of sources. What's the best way to cut through the noise? Our research suggests that personalization, and in particular the qualities of **relevance**, meaning what is recommended from a personalization standpoint is closely connected or appropriate to what the user was doing, viewing or buying; and **resonance**, meaning through the expression of the core values a business represents you'll be able to better engage your audience because there will be clear alignment.

Personalized customer experiences are deeply dependent on user patterns found within collected data. These patterns, through the use of AI-powered data analytics, can better predict and anticipate the behavior of customers, allowing businesses to better personalize and target their offerings.

According to our research, there is also a strong relationship between personalization and return on investment (ROI), with the top two factors affected by personalization being increased sales revenue (44.5%) and customer satisfaction (44%).

The impact of personalization also extends to increased website traffic, customer advocacy, and simply ensuring that users have a unique and interesting experience when interacting with the digital experiences you are providing them.

David Lockie, founder of the UK-based digital agency Pragmatic, further elaborates on the benefits of personalization: "As AI becomes the way we experience content on the web—an interplay in which the human and machine are intricately linked in the process— it can be beautiful. If we know ourselves really well we can recognize it. You know a machine can definitely understand us better, and we can provide the rest of the interaction."

"As AI becomes the way we experience content on the web—an interplay in which the human and machine are intricately linked in the process— it can be beautiful."

DAVID LOCKIE, Founder of Pragmatic

WPengine®

The values of personalization.

One of the key challenges of successfully implementing personalization is ensuring that accurate and clean data is being gathered. If the information you're basing decisions on is flawed, the end-user experience will be too. Hence, the two core values of personalization highlighted by our research are data **accuracy** and providing clarity about the **intent** of personal data use and management, in order to ensure that the data you're gathering is honest and reliable.

As personalization continues to evolve and increase in importance, AI, too, will evolve and grow to allow for greater personalization, a higher level of data accuracy, and ultimately, even higher expectations customers have regarding their personalized experiences. Our survey shows that 88.6% of consumers say accuracy of personalization is highly important. This aligns on the business end as well, with 92% of businesses signaling that the accuracy of personalization received by each customer is important.

Accuracy of data is interlinked and dependent on the relationship between businesses and consumers, which relies on clearly defining the limits of using consumer data for the discovery of patterns. Consumers want to know that organizations are aware and careful to walk the line between machine practicality and human necessity.

In fact, almost all (92.1%) consumers surveyed say they want to feel trust in a company when using their website and 91.7% say it's important that they have some degree of control over the personalization they receive. Our survey also shows that the majority (91.5%) of consumers want companies to provide transparency about how their personal data is being used for personalization.

These trends are certainly not a surprise —in fact, our survey shows that businesses aren't shying away from values-related responsibilities when creating and delivering personalized experiences, such as ensuring privacy standards are maintained (92%), accuracy of digital experiences (92%), and being transparent in how they use the consumer data (90.5%).

92.1%

of consumers surveyed say they want to feel trust in a company when using their website.

WP engine®

What to do now.

The key is "knowing the needs of your target audience," says Dr. Simon Moore, CEO and Chartered Psychologist at InnovationBubble. "I don't mean things like saving money or tactical needs. Much deeper psychological needs: How is it going to make them feel? Can we give them more control? Is it going to make them feel part of a group? What is it actually doing?"

Keeping this viewpoint of human psychology in mind, organizations must seriously consider where the limitations are: what information is collected and what is done with that information to enhance personalization accurately, without being overly intrusive or creepy.

One concern in the debate over accuracy vs. creepiness is that consumers often don't realize if they are interacting with an AI-driven tool or an actual human representative. Oftentimes, there's no disclosure and no transparency—all along the continuum of the exchange e.g. when a chat starts with a bot but then gets handed over to a human being due to complexity issues. This lack of notice can potentially cross the line for what is acceptable to users and what feels inappropriate, as evidenced by the large proportion of consumers (84.7%) we surveyed who agreed that it should be made known when AI is being used in customer-facing applications.

Business decision-makers also agreed that when it comes to deploying customer service chatbots, it should be made known to users that such a service is not facilitated by human agents (85.5%), demonstrating a solid agreement between businesses and consumers about how important this issue truly is.

"The key is knowing the needs of your target audience. How is it going to make them feel? Can we give them more control? Is it going to make them feel part of a group? What is it actually doing?"

DR. SIMON MOORE, CEO of InnovationBubble

WP engine®

The data exchange.

Every interaction a user has with a website, be it a click, a like, or a share, creates an invaluable human data point that offers businesses a glance into their customers' interests and behavior patterns.

This vast ocean of customer data has been described as the new oil, which is a fitting metaphor as organizations seek to extract value from this information to refine established business models or implement innovative, new approaches to the way they work.

Today, this data is also used extensively to train AI-based systems, improve their accuracy, and expand their capabilities. When this level of data-driven insight is applied to digital experiences, the end result is a superior degree of control over each customer journey. In turn, it's created an ecosystem in which consumers demand increasingly personalized, interactive digital experiences.

The relationship between an evolving digital world and the rights of the human end-user is at the crux of the data exchange. Only by keeping the user at the center of your objectives and being transparent with them about the use of their personal information will businesses truly be able to gather quality customer data.

David Lockie highlights the fact that if organizations want to gather valuable data, while maintaining a healthy relationship with their customers, it has to be a two-way street. By giving users ownership of their data, organizations are likely to access a larger volume of unique data.

"Where we have much more ownership and control of our data, for a communal purpose, it encourages us to give richer access of data to companies. I believe we'll see a paradigm shift. The evidence is in, most people give up privacy in exchange for luxury and convenience."

"I believe we'll see a paradigm shift. The evidence is in, most people give up privacy in exchange for luxury and convenience."

DAVID LOCKIE, Founder of Pragmatic

WPengine®

The value of data.

The value of the data that is exchanged between businesses and consumers boils down to the way businesses are able to optimize and more efficiently achieve their objectives using the data. In order to ensure the maximum use of your data, it's important to first understand the business problem you're trying to solve.

"Businesses and their data are interconnected in an extremely tight way," says Evan Shellshear, Head of Analytics at Biarri. "How can they put their data in a format that's reliable and high quality with a specific data steward managing it to ensure a proper process flowing through it, be it AI or machine learning? If there's 100 percent of a project to be solved, I would say 40 percent of that is data, in the sense of cleansing, preparing, and getting the data ready."

Once the data is prepared and in sync with an AI platform, the results are invaluable. Our survey shows that when businesses were asked about improvements they've experienced in their key performance indicators (KPIs) since adopting AI-based systems to make better use of the data that customers share with their organization, 41% said they saw an increase in sales revenue, 40% saw in increase in website visitors and 38.7% saw in increase in customer satisfaction.
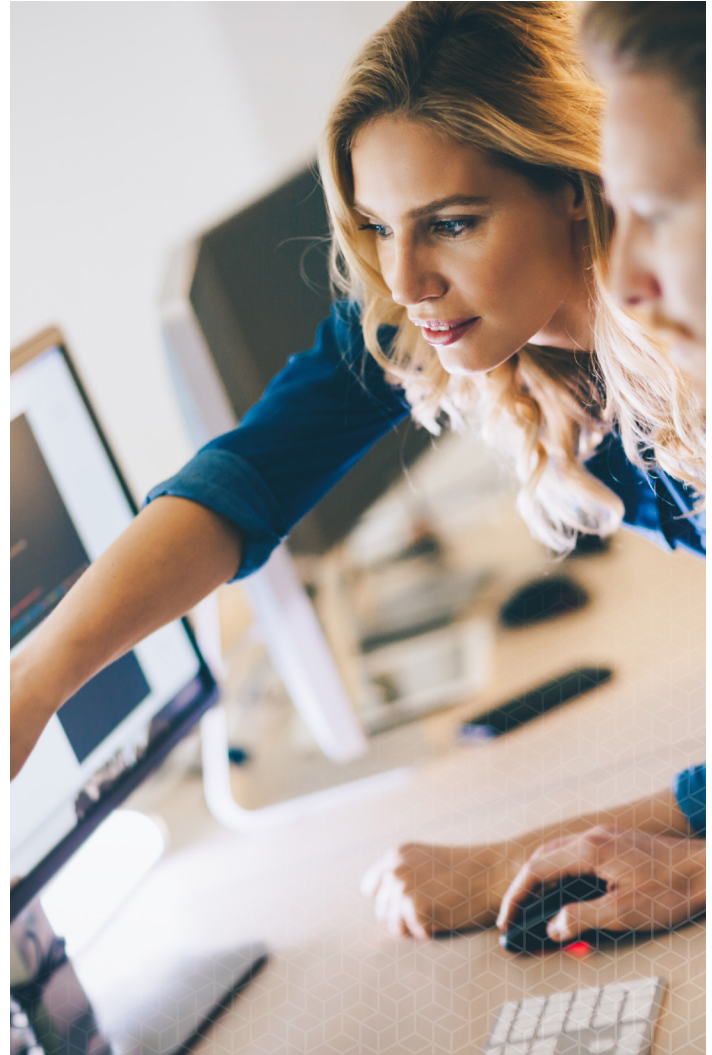
The values of the exchange.

With an escalating number of incidents concerning data, breaches of privacy, and regulations such as the EU's GDPR coming into effect, our research stresses that the two core pillars of a successful data exchange relationship are **trust** and **honesty** between a business and its customers. Businesses must carefully tread the line between the practical benefits of an AI-powered web, and the ethical implications of collecting and using the data that fuels it. Our survey shows that when it comes to sharing data, consumers are overwhelmingly concerned with two things: security and purpose.

SECURITY

Customers want to know that their shared data is secure, protected, and used only in the way they agreed for it to be used—and they're not going to simply take your word for it. Today's digital audiences will demand information about how their data is being used, who it's being sent to, and for what exact purpose.

When we asked consumers what their main concerns were when sharing personal data, protecting that information and meeting established security standards was a top priority (93%), second to the business being transparent about how they use their data (91.5%).

PURPOSE

In addition to feeling secure, customers need to understand the benefits of sharing their data and must gain some real value in return; i.e. how will this benefit them and improve their digital experiences. The use of personal data enables tremendous practicality—AI can save consumers time, make them more knowledgeable, help them invest their money better, reduce energy consumption by optimizing a household of IoT devices, help keep up on the latest fashion trends, and so on, the applications are limitless and the value is real.

According to User Experience and Research Specialist Anna Coppola, "the most important thing companies should invest in is the security of personal data. And then, somehow, they have to find the right balance between the information that they require and the real value it provides for customers. It has to be in exchange for something that has real value for them [customers]."

Our survey shows that 90.4% of consumer respondents expect to receive high value in exchange for the data they share with companies. In turn, 86.5% of business respondents

seek to provide their customers with real value in exchange for their personal data. The question businesses need to be asking now is, what is real value? Consumers in our survey view the data-value exchange as important in a variety of experiential contexts. The top three value-adding features were that websites are fast and efficient (92.9%), those sites offer useful information immediately when the consumer needs it (88%), and it helps them learn something new (69.0%).

What to do now.

As businesses have identified the power of consumer data, 53% of them plan to increase the use of AI to ensure efficiency and optimization of the valuable knowledge they possess. Walking down this road requires an internal system of data protection in place that truly prioritizes the protection of individuals.

Businesses have to undertake a patient, methodical process through which these crucially important values are aligned with how the business plans to execute its value delivery operations and processes. It is a balance between optimizing and pursuing efficiency while putting in the effort and due

diligence to ensure it remains a safe place for users while they're accessing it.

Having said this, the approach businesses take towards including AI in their solutions needs to align with their current ethical policies, their organizational values, and the type of company they truly aspire to be.

As businesses have identified the power of consumer data, 53% of them plan to increase the use of AI to ensure efficiency and optimization of the valuable knowledge they possess.

WP engine®

Meaningful experiences.

Advances in AI tools, such as natural language processing and voice/image recognition have made it easier for businesses to create meaningful digital experiences for their customers. By capitalizing on the data exchange outlined above, and using it to fuel deeply personal, individualized experiences for customers, it means those customers feel more like people and less like a number.

Achieving emotional resonance with customers as they navigate a digital experience helps a business align itself with the way that experience makes a customer feel.

"AI complements the relationship (between businesses and their customers)," says User Experience and Research Specialist Anna Coppola. "Having a real relationship with the customer is always important to understand how customers perceive and feel about the product—businesses should take that research and introduce customer feedback in the process. And eventually, apply the endless possibilities of AI."

If a business is able to create a positive feeling—something that taps into a person's interests, enjoyment, sense of belonging, or achievement—there's a good chance that they will achieve emotional resonance with customers and create meaningful experiences that build a loyal consumer following.
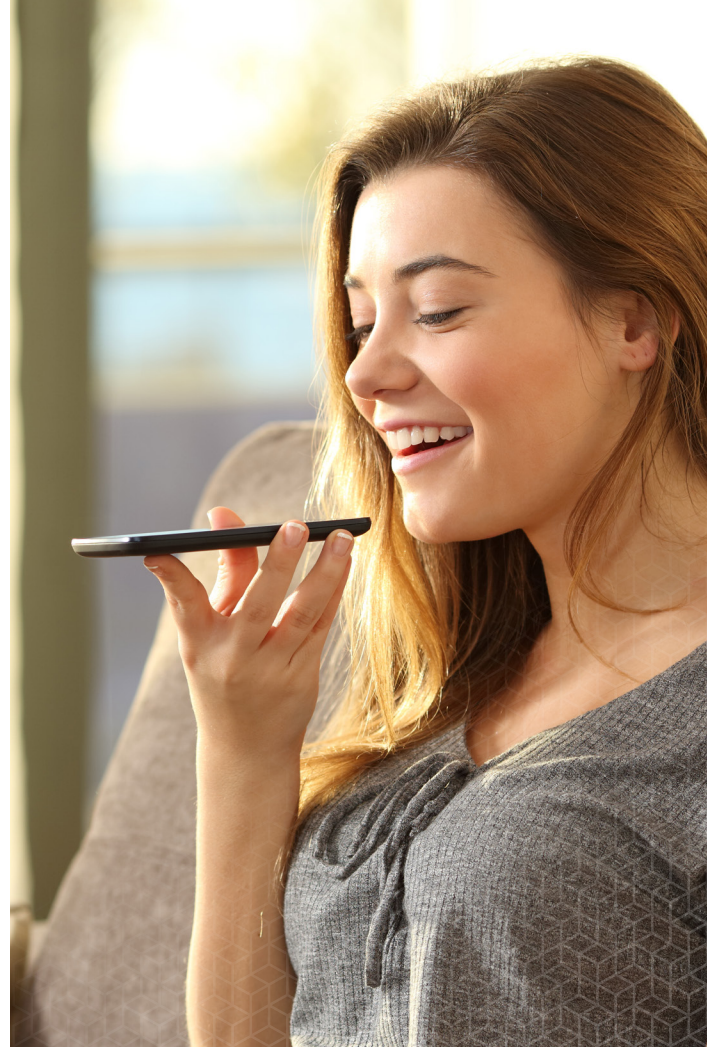
The value of meaning.

The value of creating a meaningful experience is found in the engagement it builds with your customers. Our research shows that being customer-centric has become non-negotiable for businesses, as they are already creating digital experiences that help users access information, increase efficiency, or resonate emotionally. 93% of businesses surveyed are focused on ensuring that the AI-powered digital experiences they offer are meaningful, important, and worthwhile for their customers. More than 90% of businesses say they use AI to anticipate what customers will want, like, or need on their website.

Additionally, businesses around the world have prioritized the creation of meaningful digital experiences, as 84.5% of businesses we surveyed indicate they use AI to create emotionally evocative experiences for users. Ninety percent plan to increase the use of AI for this purpose.

In turn, consumers suggest it is important to be meaningfully or emotionally engaged by different digital experiences. Our research shows the extent to which consumers felt emotional engagement is important during various types of digital experiences. The top two instances were when they were learning something new (69%) and when they were booking travel or accommodation (66.1%). Finally, 44.3% of consumers indicated they would return again later to a website where they had an experience that provided this sense of emotional engagement.

44.3% of consumers indicated they would return again later to a website where they had an experience that provided this sense of emotional engagement.

The values of meaning.

The values driving meaningful experiences are **fairness** and **diversity**. AI-enabled digital experiences will ultimately affect the human experience itself by democratising access to information and connective experiences in the digital realm. The idea of hyper-efficient and seamless access to information, with the added layer of emotional and meaningful engagement when it's appropriate, has the potential to reshape the way humans use the web to interact with the world around them.

Despite real concerns about bias in AI, there is also optimism that AI can be used to circumvent bias. Indeed, the human need for belonging, acceptance, and connection can be supported through using AI in more meaningful ways, by ensuring there is fair and neutral representation of all consumers and a democratisation of AI, and by putting self-learning software in the hands of us all.

Our research shows that more than half of consumers surveyed (54.2%) view AI as an opportunity to overcome human bias. 80% of business decision-makers agree that AI provides an opportunity for examining organisational bias, while 85.3% agree that AI provides an opportunity to examine data-related bias. But the way that AI treats bias isn't well understood. Most consumers believe that because

AI isn't human it won't have any bias. In fact, this is incorrect. AI is only as good as its data, and if the data itself is biased, it will become readily apparent from the patterns and the results. This will also allow businesses to spot issues quickly and course correct. With this heightened level of scrutiny, businesses must consciously find innovative ways to put purpose and ethics at the forefront of their consumer interaction.

54.2%

VIEW AI AS AN OPPORTUNITY TO OVERCOME HUMAN BIAS

What to do now.

Consumer engagement comes from creating meaningful experiences on the web, which is a task that businesses can no longer take lightly. Our research shows that to ensure engagement, AI-driven technologies cannot operate alone, and require a human touch to operate seamlessly into the future.

"If we want AI to solve problems and help us to progress, we have to really pick up the useful parts of human intelligence and create computer intelligence that's going to be much different than human intelligence," says Riza C. Berkan, Founder at exClone Inc.

Design teams can and should focus on interaction, while due diligence should be paid to maintaining inclusivity across all aspects of this design process. Through collaborative thinking and inclusion, AI experiences will reshape what it means to be human by democratizing the access to information and connective experiences in the digital realm, opening up opportunities that were previously unavailable to humans.

The only limitation is efficiency—-there are certain tolerances for speed, reliability, and functionality which must be met in order for these experiences to feel natural to human users. Businesses should prioritise the use of AI as a means to seek and identify real utility, not add it to a client solution for the sake of following a trend. In many cases, the simplest solution is best, as users don't want a radical redesign of a good experience. Equally, the potential to offer solutions that can meet people where they are, emotionally and physically, adds scalability and sustainability to small offerings.

> "If we want AI to solve problems and help us to progress, we have to really pick up the useful parts of human intelligence and create computer intelligence that's going to be much different than human intelligence."
>
> **RIZA C. BERKAN**, Founder of exClone Inc.

Conclusion.

As businesses continue to reimagine and refine the digital experiences they provide to customers, the three major pillars outlined in this ebook will remain crucial areas for them to focus on: personalization, data exchange, and the ability to make digital experiences more meaningful.

When the power of AI is added to each of these pillars, digital experiences truly take off, becoming more engaging and offering the human touch that today's online consumers demand. As AI continues to evolve, business leaders will have to consider both the value-based benefits and advantages AI can provide, as well as a values-based systems of ethics and due diligence required to build safe, reliable digital experiences.

In that vein, each of the three pillars is held up by a set of values and value:

Personalization: AI-powered analytics discover unique relationships, resulting in personalized customer experiences that are relevant and resonate with consumers. This is driven by an underlying ethic of accuracy and providing clear intent when it comes to engaging consumers and creating experiences that are personalized, not invasive.

Data Exchange: AI-driven tools bolster the relationship in which data is exchanged between businesses and customers. This relationship must be built on optimization and efficiency to generate data that is collected, analyzed, treated, and shared in an honest, ethical, and trustworthy manner.

Meaning: Using AI in a way that is fiercely customer-centric creates products and services that are emotionally responsive and engaging and that will create more value, access, and a voice for a broader and more diverse population.

When driving AI's potential in your business, focusing on the above three elements will be crucial. Even more important, however, will be aligning those pillars with your brand values and ethical structure. The degree of benefit AI will bring to your business deeply hinges on your ability to tie it to ethical commitments between you and your customers.

AI helps brands align with their values more effectively. Rather than fearing the massive transformation AI seems to suggest, businesses today are methodically working towards incremental change to ensure that AI is used when it makes sense, responding to consumer demand for trust and security with a deep understanding of what's at stake.

WPengine®

Methodology.

The research uses a mixed-method approach to investigate the challenges and solutions when dealing with AI and human digital experiences on the web. An in-depth literature review of academic, industry, and media sources is utilized to form initial thinking, expand the hypothesis, and inform us about key issues and opportunities identified in the report. Subject Matter Experts were interviewed to inform the initial concept and model. Further experts were interviewed to discuss the survey findings, challenges, and recommendations of real-time experience in developing AI-enhanced digital experiences on the web. Enterprise survey focuses on the enterprise perspective (200 US respondents) and consumer survey of 1000 US consumers. Data was analyzed using complex variable + single variable analysis.

Copyright and usage.

About Vanson Bourne.

Vanson Bourne is an independent specialist in market research for the technology sector. Their reputation for robust and credible research-based analysis is founded upon rigorous research principles and their ability to seek the opinions of senior decision makers across technical and business functions, in all business sectors and all major markets. For more information, visit: VansonBourne.com.

About WP Engine.

WP Engine is the world's leading WordPress Digital Experience Platform that gives companies of all sizes the agility, performance, intelligence, and integrations they need to drive their business forward faster. WP Engine's combination of tech innovation and an award-winning team of WordPress experts is trusted by more than 120,000 customers across 150 countries to provide counsel and support, helping brands create world-class digital experiences. Founded in 2010, WP Engine is headquartered in Austin, Texas, and has offices in San Francisco, California; Omaha, Nebraska; San Antonio, Texas; London, England; Limerick, Ireland; and Brisbane, Australia. For more information, visit WPEngine.com.