



10 **IN** 17

GLOBAL TREND REPORT

accenture **strategy**

FOREWORD

Reset. One big, global reset. It's what 2016 felt like. Across the world, in many of our markets, our teams and clients witnessed political, economic, and cultural disruptions that have created not only material uncertainty but also recast the near term realities of many of our lives. It's time we adapt. It's what we do as humans and it's what many businesses need to do to stay relevant. Pivot to the new.

Innovation is the mechanism to usher in the new. It is the movement that has (thankfully) replaced disruption and transformation as the vogue lexicon in management circles around the globe. Yes, digital is changing everything, creating new promises and challenges. Yes, transformation is warranted – whatever that means. But pioneering organizations are looking to *simplification* and *acceleration* as the priority inputs to catalyze growth. Digital just happens to be the tool, with innovation the ultimate objective.

This year, there will be an intentional movement BACK TO THE BASICS.

Driven by emerging generations with lifestyle motivations and digital-born mindsets, many will partake in a revived curiosity to solve some of the world's toughest (and most basic) challenges. This will include collaborative efforts aimed at the mega theme of betterment, where immersive digital experiences will reimagine food, transportation, commerce, and communication, for example. Mindfulness will be the global movement. Machines will be the growth in the labor force. Healthcare will become Lifecare.

In 20|10+7, embrace the reset and return to the basics.

Live. Love. Laugh. (Sleep). Repeat.

**POWER IS SHIFTING TO A NEW, DIGITAL-BORN GENERATION
SET ON PASSIONATELY REIMAGINING BASIC NEEDS FOR THE
BETTERMENT OF THE WORLD.**

METHODOLOGY

With a simple goal of packaging this year's disruptive trends and digital realities, we organized a millennial-centric team to search, uncover, and discover leading indicators of change around the world. Our focus was the mega space of health, life sciences, communications, media, and technology. It's the space many want to win. It's a space we know (really) well.

Our team started this effort first looking to learn and collate a master collection of new realities, reimagined expectations, altered interactions, and persistent challenges. This included parsing through project learnings, conducting working sessions with our own strategists across 12+ countries, and hosting countless formal and informal discussions with leading executives, futurists, technologists, scientists, policy makers, friends, family, and chance people we talk with in our travels.

Through both art and science, the team evaluated a catalogue of more than 175 themes, theories, and thoughts. Rigorous (friendly) debate, late night white-boarding, copious amounts of Sticky Notes, Red Bull, and on-demand food delivery powered a team that is proud to present our 20|10+7 trends.



'16 TO '17

2016

MASTER P

LOCK IT UP

SHAKE YOUR ASSETS

HR TO THE ER

TROUBLE WITH THE CURVE

MASHUP MOVEMENT

THERAPPY

ON DEMAND

MORE THAN A FEELING

GEN V

2017

EPICDEMIC

WHY SO SERIOUS

BREAK THE BANK

ALL THE FEELS

HELLO WORLD

HUNGRY FOR CHANGE

LIFE IN THE FAST LANE

BETTER WITH AGE

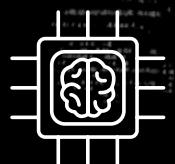
AU NURTUREL

NAMASTE FLY

10in17 TRENDS



EPICDEMIC



WHY SO SERIOUS



BREAK THE BANK



ALL THE FEELS



HELLO WORLD



HUNGRY FOR CHANGE



LIFE IN THE FAST LANE



BETTER WITH AGE

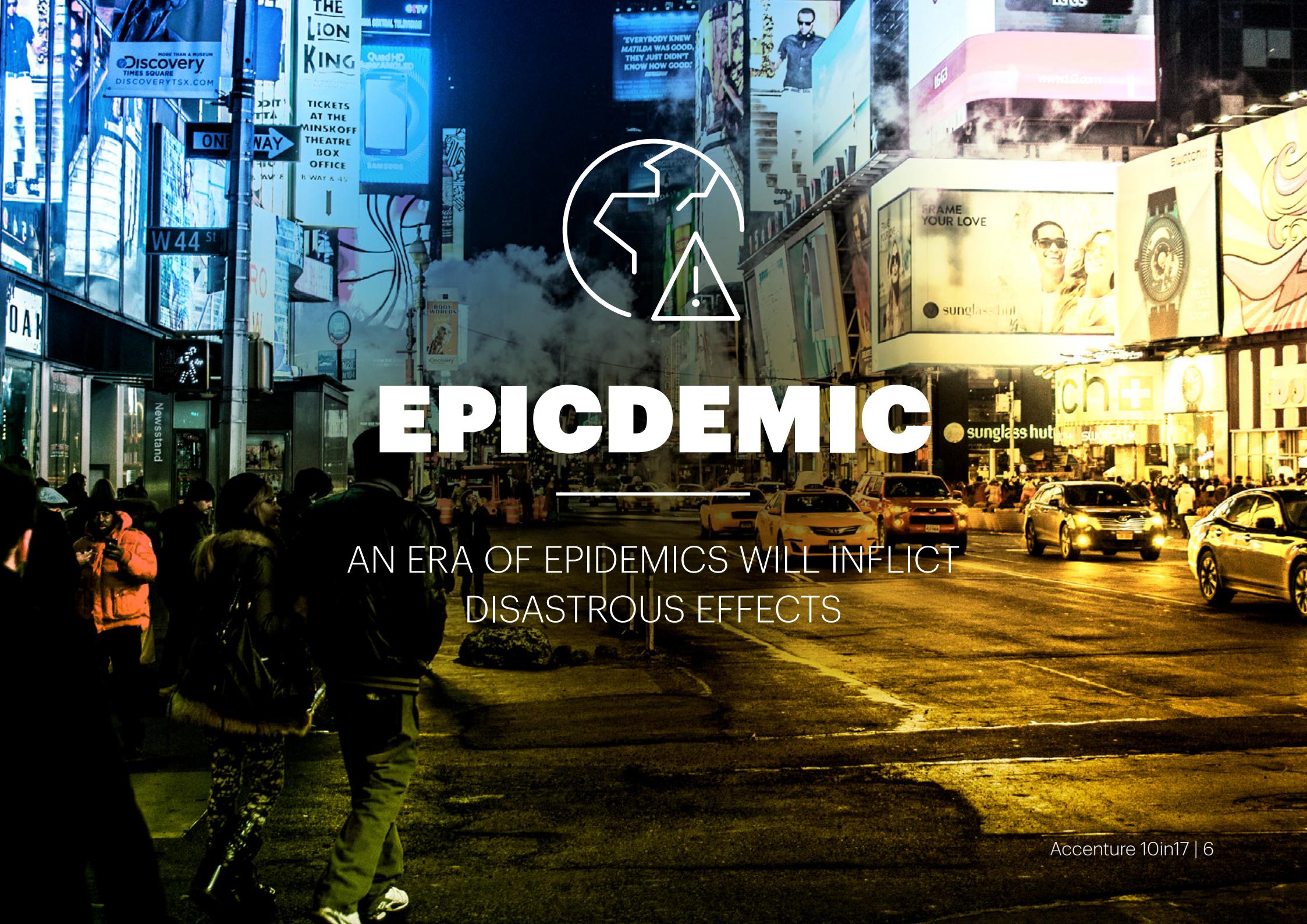


AU NURTUREL



NAMASTE FLY





EPICDEMIC

AN ERA OF EPIDEMICS WILL INFILCT
DISASTROUS EFFECTS

INCREASED VELOCITY OF EPIDEMIC VARIANTS WILL REACH PANDEMIC PROPORTIONS

It's a small world after all. Humankind is more interconnected than ever before, with mobility and movement at the center.

Globalization has increased the flow of people, goods and money across physical and political borders. International travel is expected to increase by 60 percent over the next decade.¹ Global value of goods flowing internationally jumped from \$200 billion in 1990 to more than \$4 trillion in 2012,² and financial capital moving across borders skyrocketed from \$250 billion in 1970 to almost \$70 trillion in 2010.³ Despite recent nationalist trends, the world is increasingly global.

And while globalization has raised millions from poverty and improved standards of living, it is also creating and facilitating the spread of a series of epidemics plaguing societies across the globe. We expect conflicts, natural disasters, disease and addictions to be a key area of focus over the next few years.

Our world is in the midst of a "Great Migration" that is displacing more people than at any time in our history.

Today, violence has forcibly removed more than 60 million people worldwide⁴—11 million alone in Syria since 2011⁵ and scores more across places like Central America and Africa—or nearly 24 per day every minute of 2015.⁶ Terrorism has caused entire populations, such as Bosnians, Somalians and Rwandans, to resettle.

But displacement does not stop with war, as more than 26 million were displaced by natural disasters between 2008 and 2014 in places like Haiti, the Philippines and even Japan (where 250,000 remain away from home four years after the 2011 earthquake).⁷

The spread of disease and addiction have also increased. Of late, Zika, Ebola and swine flu (to name but a few) have devastated communities, impacted tourism and reduced productivity. Further, the spread of addictions to opioids, alcohol and drugs have been supercharged due to illicit trade and porous borders.

Epidemic variants are growing in frequency and magnitude, and globalization is escalating threats to health.



INVISIBLE AND VISIBLE IMPACTS WILL DISRUPT GLOBAL SOCIOECONOMIC STRUCTURES

Epidemics are inflicting physical, psychological and institutional harm on our world. Implications are widespread and the tail risk is catastrophic.

SCARS OF CONFLICT

The most visible impact of epidemics is physical. For example, 91 Americans die every day from an opioid overdose⁸, more than 11,000 have been killed from Ebola⁹ and nearly 3,800 refugees died crossing the Mediterranean between January and October of 2016.¹⁰ Further, studies indicate that epidemics and displacement make populations more vulnerable, leading to shorter life expectancy, higher cancer rates, more birth defects, greater infant mortality and higher incidence of asthma, diabetes and cardiovascular disease.

MORE COLLATERAL DAMAGE

But the ramifications go deeper as well, harming minds, bodies and spirits. For example, studies have shown that 10-40 percent of settled refugees suffer from post-traumatic stress disorder (PTSD), and 5-15 percent face major depression.¹¹ First-generation migrants are

at a significant disadvantage, lacking many of the basic social determinants of health—among them safe and secure food, shelter and education—to lead healthy and productive lives.

SYSTEM OF A DOWN

Of most import, epidemic variants do irreparable harm to institutions and economies. According to some estimates, by 2050, if no action is taken on drug-resistant strains of bacteria, the world would lose an additional 10 million lives each year and cost around \$100 trillion in lost output—the equivalent of losing the entire UK economy from global output.¹² For a more tangible example, the Ebola outbreak in Liberia and Sierra Leone led to a steep decline in travel, tourism and trade, reducing economic growth to 38 percent and 35 percent of expected, respectively.¹³ Finally, substance abuse disorders cost the US \$420 billion each year.¹⁴ And, in 2010, excessive alcohol use cost the US economy \$249 billion.¹⁵

Epidemics are devastating and the true toll, across visible, invisible and institutional, is only poised to increase in the coming years.



Prevention of pandemics in all developing countries would require global infrastructure costing more than

\$3.4 BILLION
per year.

MICRO MOVEMENTS OF SOLIDARITY WILL BE PURSUED THROUGH UNIQUE ALLIANCES

NEW FRIENDS AND NEW OPPORTUNITIES

To combat epidemics that threaten the existence of our civilization, the convergence of public and private stakeholders will (and must) occur. We expect creative arrangements to appear, such as the relationship between the [Weather Channel and the Red Cross](#), collaborating to deliver news about weather and emergency preparedness, home fire prevention and disaster responses to the masses.¹⁶ We also expect organizations to take moonshots and begin addressing truly global issues. For example, the global public-private partnership [ID2020](#) is helping the estimated 1.8 billion people who do not have a legal identity.¹⁷

Tactically, there will be new opportunities in diagnostics, treatment and training / education. The World Bank estimates the prevention of pandemics in all developing countries would require global infrastructure costing more than \$3.4 billion per year, yet delivering \$37 billion per year in expected economic benefit, or a rate of return ranging from 50 percent to 123 percent per year, depending on the country.¹⁸ The lack of such a public health infrastructure is driving more than 40 percent of infectious disease outbreaks internationally.¹⁹

BETTER WEAPONS FOR THE WAR ON EPIDEMICS

Improved diagnostics will help to better identify and assess global events early enough to deploy provisions and mitigate contagion. But the treatment of global issues could also use a boost. Fortunately, groups like the [Gates Foundation](#) are making progress, for example, nearing the heroic eradication of polio. We are also happy to report that governments appear to be stepping up as well, with agencies like the U.S. Department of Health and Human Services taking quick action to address issues like the opioid crisis.

Education, advocacy and training are the final cogs in the machine. Overcoming harmful cultural norms (such as Africans touching the dead and contributing to the spread of Ebola) will reduce the toll of epidemics.

We expect technology to be the final and most critical piece of the puzzle. Social media will predict and track outbreaks, phones will be the mechanism for identifying and alerting us to perceived threats, and advanced analytics will help trace the origins and causes of global crises in real time.

Humankind confronts issues of grave proportions, and in the coming years, we expect the threat to grow. Fortunately, signs of cooperation, technological advancement and progress encourage us. Only when our backs are against the wall do humans shine brightest.



Lack of health infrastructure is driving
>40%
of infectious disease outbreaks.



OUTSMART EPIDEMICS

Designed to help give the world an insurance policy against epidemics, CEPI (Coalition of Epidemic Preparedness Innovations) is a global coalition to create new vaccines for emerging infectious diseases officially launched at the **2017 World Economic Forum**. CEPI's goal will be to outsmart epidemics by developing safe and effective vaccines against known infectious disease threats that could be deployed rapidly to contain outbreaks, before they become global health emergencies. CEPI is already backed by an initial investment of **\$460 million** from the governments of Germany, Japan and Norway, along with the Bill & Melinda Gates Foundation and the Wellcome Trust.

GO FOR THE GREATER GOOD

Acknowledge and join the movement; only together can we make the world a better place.

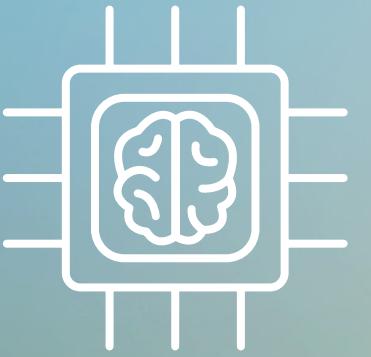
THINK BIGGER

Develop policies and entertain novel partnerships that better provide unique public and private sector offerings.

LEAD THE MOVEMENT

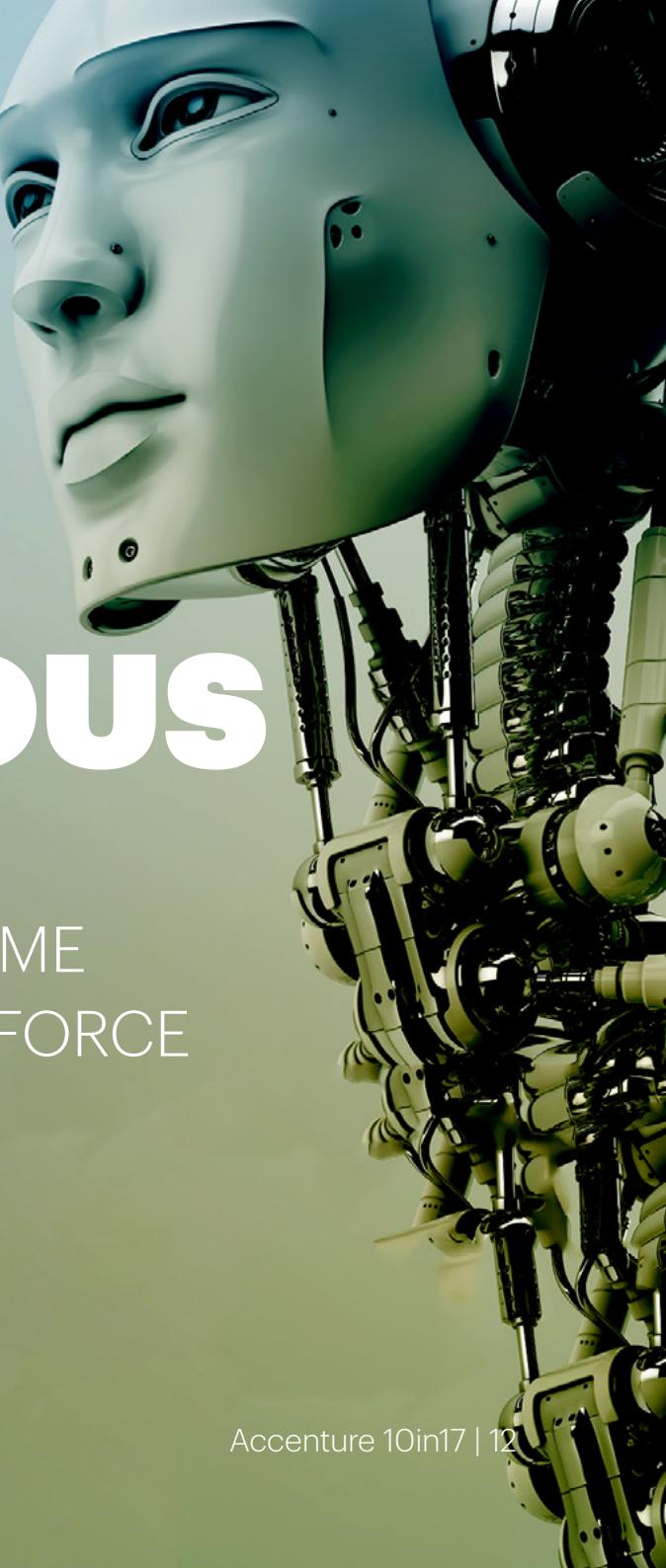
Introduce digital-first solutions to improve diagnostic / monitoring, treatment (or recovery) and training capabilities.





WHY SO SERIOUS

COGNITIVE THINKERS WILL BECOME
THE NEWEST RECRUIT TO THE WORKFORCE



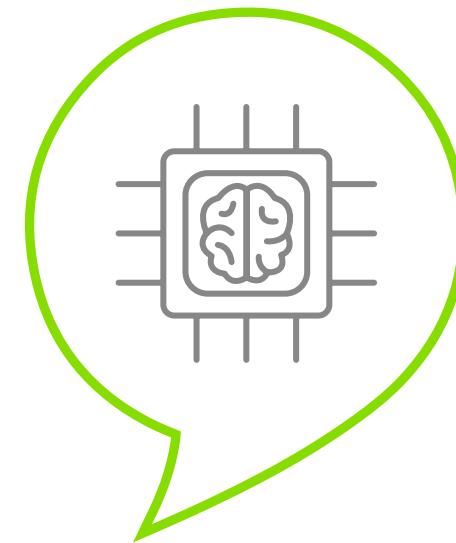
AI & COGNITIVE COMPUTING WILL BECOME THE MOST TRANSFORMATIVE FORCE IN THE WORLD

Artificial intelligence (AI) has the potential to become the world's super force. At Accenture, we define AI as a collection of multiple technologies that enable machines to sense, comprehend, act and learn, either on their own or to augment human activities. Everyone who is anyone is talking about AI, and where there is smoke, there is most certainly fire. Cognitive thinkers and humanized machines are already in our phones, they are swiftly making their way into our homes, and before we know it, they will be the newest recruits to the healthcare workforce.

Steep investment in this burgeoning force will continue to skyrocket as we solidify, diversify and expand AI applications. Funding to AI startups has increased by nearly 1000x in the past five years, with \$588 million in 2012 increasing to \$5 billion in 2016.¹ Major players are staking large bets on AI. Amazon with Alexa. Apple with Siri. SFDC's got Einstein. Google, Facebook and Microsoft have AI ventures of their own. Last but not least is IBM's dominant force, [Watson](#).

Likely not surprising, IBM filed for a record-breaking 8,000 patents in 2016, 2,700 of which were related to cognitive computing.² These players will continue making mega moves from mind to machine.

Healthcare will be reimagined, moving quickly from analytics to diagnostics to care delivery itself. "By 2025, AI systems could be involved in everything from population health management, to digital avatars capable of answering specific patient queries," says Frost & Sullivan analyst Harpreet Singh Buttar.³ According to Accenture research, AI will pay for itself, generating \$180 billion in value to the US healthcare economy by 2026. Primary drivers include robot-assisted surgery (\$52 billion), virtual nursing assistants (\$33 billion) and administrative workflow assistance (\$24 billion). Healthcare providers will also save by delivering superior quality, reducing total cost to serve and minimizing adverse events associated to clinical mistakes. Keep reading for more proof of this new reality.



TECHNOLOGY WILL SPAWN NEW HUMANIZED OR ANIMALIZED LIFEFORMS AND RELATIONSHIPS

Artificial intelligence is already here, and it is embedded into our daily lives. We are already calling upon virtual assistants to tell jokes, help us order detergent pods or play our favorite songs—even help us find new ones. Take, for example, Spotify's Discover Weekly playlist – 71 percent of listeners save at least one song each week. Given these perks, it's no surprise that Amazon Echo was the number one gift for the 2016 holiday season, with sales increasing 9x over the previous year.⁴

We are rolling in the deep. In fact, we are already starting to hold technology to the same cognitive and empathetic standards as you would your mom, your friend or a customer service representative. Have you ever gotten mad at Siri when she misheard your request for directions and instead started calling your next-door neighbor from 10 years ago?

AI WILL BECOME A NEW PAIR OF HELPING HANDS

Frontline gatekeepers, companions and concierges will continue to pivot from mind to machine across all industries. Such changes happened long ago as technology eliminated the need for gas pump attendants, and bank tellers were replaced by ATMs.

What will the future hold for call center operators, house cleaners or the truck drivers who will take a back seat as the rubber hits the road with driverless trucks? Even man's best friend is among those getting in on AI. [Roobo's Domay](#) is a 9-inch artificial intelligence powered pet that can learn tricks, play media and take pictures—no bone required.⁵ [Boston Dynamics' SpotMini dog](#) will even do your dishes or take out the trash.⁶

BETTER THAN A HUMAN TOUCH

In healthcare, machine companions, caregivers and clinicians will become better than the real thing. [Sense.ly](#) developed a virtual nurse that provides customized monitoring and follow-up care, with a strong focus on chronic diseases. [Medwhat's](#) virtual assistant answers medical and health questions for consumers and doctors instantly. [Your.MD](#) is an app that allows users to check symptoms, ask follow-up questions and receive answers that have been written by doctors and verified by the UK's National Health Service. And that is only the beginning.

What happens when technology learns to empathize, and is built for the sole purpose of serving you? Just imagine – you show up to the ER sick as a dog, well past midnight. A less-than-friendly receptionist greets

you, and misspells your name. Then, you are taken into triage where a nurse, coming up on hour 11 of a 12-hour shift, examines you. You hope they are listening, praying that they care, but you can't be too sure. Humans, while beautiful magnificent beings, are only human after all. Sooner than we think, cognitive thinkers will surpass practicality and productivity and come to life.



Funding of AI startups reached
\$5B IN 2016,
up from \$588M in 2012.

ADOPTION BY PIONEERS WILL START TO DISRUPT LABOR MARKETS AND CONTRIBUTE TO SOCIAL STRIFE

AI's implications on the workforce will be a hot debate this year. There are two schools of thought. For those that look on the bright side, AI will automate the mundane, allowing existing labor and capital to be used more effectively as workers will focus on what they do best – imagine, create and innovate. For the realist out there, AI will do what we do, but significantly better. And in no time, we will all be out of a job.

Workers are at high risk of potential automation all over the world—47 percent in the US, 35 percent in UK and 49 percent in Japan.⁷ In Japan, the IBM Watson Explorer is reportedly replacing 34 human insurance claim workers at Fukoku Mutual Life Insurance. After a \$1.3 million investment to install the system, the company expects to save \$1 million a year in salaries and improve productivity by 30 percent.⁸ Another one for the list, planes practically fly themselves. Did you know that the number of annual pilot certifications has dropped by more than 50 percent since the 70's?⁹ These are just a few examples of a burgeoning set of offerings that will transform labor.

HEALTHCARE IS NOT IMMUNE

Healthcare cannot avoid the AI takeover, especially considering the amount of labor required—and the expense of that labor. According to Becker Hospital Review, more than 50 percent of a hospital's operating revenue goes to labor costs.¹⁰ Consider this. To become a doctor in the US, it costs at least \$250,000. And after all that money and nearly a decade of training, human error is still the third leading cause of death in the US, responsible for 150,000 deaths last year alone.¹¹ Within maybe five years, AI will be better than humans at diagnosing medical images and better than legal assistants at researching case law.¹²

REGULATION WILL BE DEPLOYED TO CONTROL INNOVATION

AI technology is developing more quickly than society's ability to consume it. Regulation will be deployed to control the scope and pace of innovation. At Davos this year, Marc Benioff, CEO of Salesforce.com, warned somberly of the "digital refugees" that would be created by AI. "This is the moment, I think, when we have the

highest level of anxiety because we can see advances in AI that are beyond what we had expected," he said. "It's happening at a rate and a capability that we are worrying about how it will impact the everyman, the broad range of workers around the world. There is no clear path forward."¹³

International forums and thought leaders are also sounding the alarm about AI. On October 2016, White House's National Science and Technology Council's Office of Science and Technology Policy issued a briefing recognizing the state of AI, laying out a set of preliminary guidelines and setting forth a plan for government-funded research.¹⁴ Stanford University has launched a One Hundred Year Study on AI to inform debate and provide guidance on the ethical development of smart software, sensors and machines.

There are many questions, but not a lot of answers. The challenge will be to accept the signs of the times, yet strive to control the path into the unknown world of minds and machines.



ACHIEVING BETTER ACCURACY THROUGH AI

As the quality and quantity of patient data rapidly grows to **25,000 petabytes** worldwide by 2020, Enlitic uses deep learning to improve patient outcomes. By incorporating a wide range of unstructured medical data—radiology and pathology images, lab results, genomics, patient histories and electronic health records—the system can achieve **higher accuracy and deeper insights** for every patient. Enlitic's deep learning networks provide rich insights into early detection, treatment planning, and disease monitoring to achieve better accuracy.

BRACE FOR BOTS

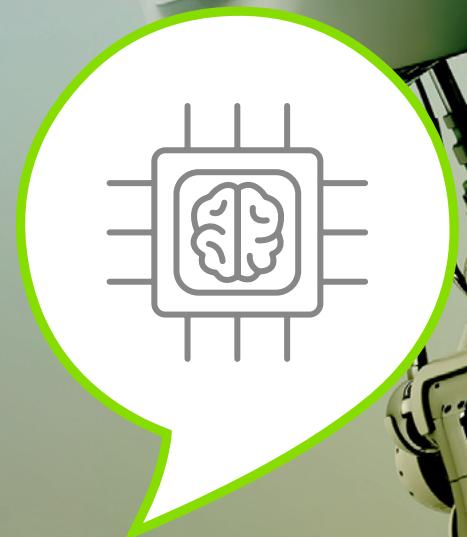
AI is here. Make sure you have the right team and talent to embrace this new reality.

ADD THE HUMAN TOUCH

Explore humanized technologies to enhance consumer experiences and improve outcomes.

INNOVATE WITH CAUTION

Enact policies to lay an ethical foundation, control pace and direction, and address redistribution effects.





BREAK THE BANK

COMMERCE WILL BE CHANGED AND
PRIOR EXPERIENCES WITHDRAWN

ACTIVITIES AND SOCIAL DEALINGS SURROUNDING COMMERCE WILL DISAPPEAR

Very quickly, commerce as we know it is changing, gaining agility, integration and convenience. Tools and technologies will be accelerants, rather than speed bumps, in the journey toward seamless and near-invisible interactions.

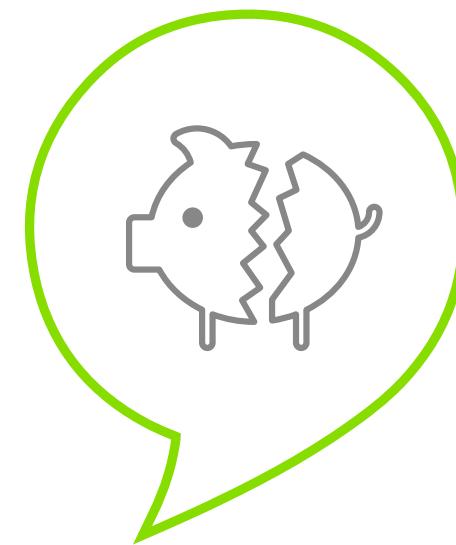
Today, companies are blurring traditional lines between commerce, communication and lifestyle. Already, commerce is becoming a critical cog on social networks, and vice versa. Take Facebook for example; the social network launched a free friend-to-friend payments feature on its messaging app.¹ [Venmo](#), a peer-to-peer wire transfer service, added a social news feed. This blending of functions through digital platforms is creating exciting new experiences for customers.

In this day and age, companies are competing on experiences and using digital platforms to streamline, simplify and speed up transactions. The time to complete or process transactions is decreasing, removing key friction points for consumers. [Abra's](#)

blockchain-enabled remittance service does seamlessly and securely what Western Union makes long, costly and frustrating.² Further, the modern consumer demands the ability to buy, sell and share through singular interfaces, and leading organizations are taking note. Take Pinterest, the photo-sharing app that now features a "buy" button on items that it "recognizes," allowing users to make in-app purchases of the favorites they pin.

Finally, experience centers on convenience, and new, mobile functionality lets us conduct all kinds of commerce on the go. With modern banking apps, you can monitor spending patterns, access your credit report or track your investments anytime, from anywhere.

Shifting tides in the payment and commerce space make one thing clear: tomorrow's change makers are the ones who offer fast, simple and convenient interactions.



TRANSFORMATIONAL CHANGES WILL REWIRE LEGACY FINANCIAL INTERACTIONS

Digital technologies are upending traditional infrastructure—from the way we finance and manage capital, to the way we store and transfer value, to the way we secure integrity and establish trust. In the third quarter of 2016 alone, fintech funding reached \$2.9B across 178 deals,³ a sign that the space is heating up.

FINANCING AND MANAGING CAPITAL

New tools and social customs are changing how individuals and businesses access and interact with their finances. For example, peer-to-peer lending platforms like [Lending Club](#), and crowdfunding mechanisms like [Indiegogo](#), are democratizing finance, allowing individuals to contribute to projects and companies in return for a piece of the action.

Furthermore, technology is helping us make more informed decisions while reducing costs. Digital-native financial institutions like [SoFi](#) are using algorithms to optimize loan provision. Wealth management applications like [Mint](#) enable visibility and visualization while providing targeted recommendations on managing your personal affairs; and companies like

[MetroMile](#) are introducing new financing models that, for example, provide discrete, on-demand insurance products that reduce consumer hassles.

STORING AND TRANSFERRING VALUE

Digital is also facilitating faster, more seamless commerce. For consumers, companies like [Stratos](#) are creating virtual wallets that combine an individual's debit, credit, loyalty memberships and gift cards, while exchanging new forms of cryptocurrency devised by companies like [BitPay](#) and [Coinbase](#). Moreover, technology is reshaping the storefront. A sign of the times, Amazon launched a cashier-free grocery store in Seattle that lets shoppers grab, go and charge to their Amazon account.⁴

SECURING INTEGRITY AND TRUST

Most importantly, modern mechanisms are combatting fraud, waste and abuse through advanced analytics and distributed databases. Blockchain is enhancing speed, security and legitimacy of interactions. Cybersecurity companies like [Trustev](#) are scanning transactions in real time to confirm legitimacy and protect consumers, and

"RegTech" startups like [Ayasdi](#) are partnering to, among other things, help big banks pass U.S. Federal Reserve stress tests.

Technology will be the saving grace for our banks (which spend more than one billion dollars each year on regulatory compliance) and for our companies (which lose 5 percent of revenues and 2 percent of margins each year on ecommerce fraud).⁵

It pays to embrace technology in an era where speed, simplicity, and convenience are the new currency.

INTEREST WILL BE AIMED AT THE CONVERGENCE OF HEALTH AND WEALTH

We expect advances in commerce to materially affect healthcare in the coming months and years. Beyond making seamless what today is complex and arduous, we anticipate that novel tools and techniques will reshape how we perceive, capture and orient around value, affecting people, processes and business models.

Within the healthcare system, 2017 will see tighter integration between personal and healthcare-related finances. Whereas institutions like [John Hancock](#) are already tying insurance premiums to healthcare data, we foresee future applications empowering financial advisors to manage both investment portfolios and healthcare vehicles (e.g., HSAs, Medicare Advantage programs).

CONSUMER-FRIENDLY HEALTHCARE COMMERCE

Consumer-tech will quickly become enterprise-tech. Complex, eye-reddening, paper-heavy billing will be revamped as digital technology simplifies interactions between payers, providers and consumers.

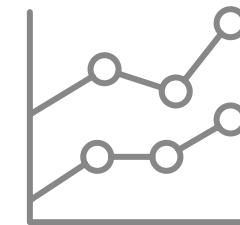
Today, just 15 percent of commercial insurers make payments to medical providers electronically, and even

then, leading companies only send ~40 percent of payments electronically.⁶ On the consumer side, services like Apple Pay, for example, streamline co-pay payment through instant verification and authentication. Further, institutions are actually adopting these mechanisms! Nonprofit health system Memorial Hermann deployed a payment platform in 2015 and has since raised self-service payments by 53 percent, while reducing collection costs by 23 percent.⁷

IN DIGITAL WE TRUST

Commerce is disappearing. It is being sped up, integrated, simplified and made convenient to the point where consumer friction is being eliminated entirely. And while digital technologies are making life easier for many, they also open the door to dangerous commerce-enabled cyber threats: Identity fraud, extortion / blackmail and theft.

We expect to see commerce-related change both positive and negative in the coming months. The future is bright, but navigating the downsides requires that we put our money where our mouths are.



Consumer-tech will quickly become
ENTERPRISE-TECH.

SIMPLEE

PAIN-FREE PAYMENTS FOR PATIENTS

Operating at the intersection of fintech and healthcare, **Simplee redefines the financial experience for patients and providers alike** across the entire healthcare journey. By creating a B2B-style payment and loyalty platform for hospitals, hospitals increase revenues while providing a unified billing experience for patients. Working with nearly 900 hospitals and physician groups, and 5 million patients across the US, **Simplee has raised nearly \$40 million** by bridging the gap with “beautiful” pain-free bills and a one-stop checkout.

CASH IN ON EXPERIENCE

Design and deliver applications that create delightful social dealings within commerce.

SMOOTH THE FOLDS

Use platforms and technologies to enable seamless commerce.

BRANCH OUT

Cast aside traditional commerce mindsets to create new value for customers.





ALL THE FEELS

TRUTHFUL UNDERSTANDINGS WILL TRUMP
SELF-AFFIRMING INFORMATION OUTLETS

CONTINUED MISINFORMATION AND FACTUAL MISREPRESENTATIONS WILL SPREAD MATERIAL HARM

Dubbed 2016's word of the year by Oxford English Dictionary, "post-truth" is off to a fast start in 2017. Defined as "relating to or denoting circumstances in which objective facts are less influential in shaping public opinion than appeals to emotion and personal belief," the phenomenon—alongside iterations #FakeNews and "alternative facts"—is expected to remain a part of the daily spin cycle.

Incorrect information is spreading rapidly. A sign of the times: in the final months of the 2016 US presidential campaign, the top-performing fake election news stories on Facebook generated more engagement than the top stories posted by reliable news outlets.¹ Further, Harvard University estimates that 15-30 percent of online reviews are fake² and Facebook suggests that 8.7 percent of its accounts are fake.³

Moreover, the fake news movement is sparking social unrest. During the 2014-2016 Ebola outbreak in West Africa, false rumors created mass hysteria, causing citizens of Guinea to overwhelm the country's Ministry of Health with 200-300 calls per day asking questions like, "Will I really be protected from Ebola if I eat three raw onions a day?" and "Is it true that a daily intake of

condensed milk can prevent Ebola?"⁴ More impactful than the administrative dysfunction, these rumors hindered efforts to slow the spread of the disease.

Fanning the flames, fake news has shown itself hard to overcome. An infamous 1998 study in the UK linking childhood vaccines and autism—deemed insubstantial and illegitimate by the country's Department of Health—has done irreparable harm; as recently as 2010, one in four US parents incorrectly believes that some vaccines cause autism.⁵ Conversely, some products deemed beneficial for consumption by the public have little to no scientific backing. Case in point: vitamins and supplements. The UK's NHS suggests, "it is clear that the perceived benefits of many supplement products have not been confirmed... and in some cases they may be harmful."⁶ Yet nearly half of all Brits are daily vitamin users.⁷

As fake news continues to pervade society, trust in traditional institutions has reached an all-time low and shows no signs of recovering. For example, only 32 percent of Americans have a "great deal" or "fair amount" of trust in the media, down 8 percentage points from 2015.⁸

Fake news is a threat to open society and to democracy. According to the *New York Times*, "Fake news, and the proliferation of raw opinion that passes for news, is creating confusion, punching holes in what is true, causing a kind of fun-house effect that leaves the reader doubting everything, including real news."⁹



SOURCES OF DISTORTION AND DISTRACTION WILL GAIN A FOLLOWING

"Our news ecosystem has changed more dramatically in the past five years than perhaps at any time in the past 500," says Columbia University Tow Centre of Digital Journalism Director Emily Bell.¹⁰ In 2017, we expect the volume, speed, and impact of fake news to dramatically increase.

The internet dramatically changed the ways in which information—and misinformation—is shared. Gone are the days of tuning into the evening broadcast to get the day's highlights from legends like Walter Cronkite or Tom Brokaw. Access to information is now 24/7, from scheduled news to real-time, late-breaking news. People are overloaded by information coming from a variety of sources, and it's difficult to discern what's right and what's not.

Real (or fake) news can go viral in seconds. A study at Columbia University showed that misinformation is just as likely to go viral as reliable information.¹¹ People thrive on scandal and intrigue, and media outlets just want people to keep clicking.

WE'RE ALL EARS

Self-affirming loops and more openly biased media outlets will flame the fire. People often believe what they want to believe, especially if news aligns with our thinking. Misinformation that conforms to our established political, religious or social views is especially sticky, permeating public discourse and heightening societal polarization.

According to the *New York Times*, people are becoming more entrenched in their positions, more likely to attack the other side, and less inclined to listen to each other.¹² Former White House Press Secretary Josh Earnest affirmed this belief, stating, "there is no denying the corrosive effect of fake news."¹³

Michael Lynch, professor of philosophy at the University of Connecticut, summed it up perfectly when he said, "There's no way for me to know what is objectively true, so we'll stick to our guns and our own evidence. We'll ignore the facts because nobody knows what's really true anyway."¹⁴



The internet has changed the way information and misinformation is shared and we expect the rise of FAKE NEWS to increase dramatically in 2017.

NEW APPROACHES AND METHODS TO INFORMATION QUALIFICATION WILL BE GLOBALLY SOURCED

On the quest for truth, there will be new efforts to combat fake news and issues of misinformation. Major sites are attempting to block fake news before it happens by proactively getting to the root of the problem. In November 2016, Google began banning websites that peddle fake news from using its online advertising services. Further, Facebook has updated its policies to remove display ads that show misleading or illegal content.¹⁵

Companies are also deploying bots and algorithms to sift through and classify news as “true” or “fake,” though with mixed results. In 2016, to combat perception that it was influencing public discourse, Facebook fired its human trending news team and replaced it with algorithms... only to rebuild the team after hoax and satirical content crept into news feeds.¹⁶

ESTABLISHING LEGITIMACY

Facing an existential crisis, new purveyors are taking measured action to enhance and showcase their legitimacy. For example, in early 2017, Facebook—the social media platform used by more than 44 percent of Americans as a source of news¹⁷—launched the “Facebook Journalism Project” to promote “news

literacy” and give users trusted information.¹⁸ Facebook is partnering with third-party fact-checkers, such as Snopes and the Associated Press, to evaluate the reliability of stories flagged as fake. In addition, Twitter has a “blue tick” system that verifies the organization as a credible news source.

A HEALTHY DOSE OF INFORMATION

Because of their vital roles as sources of truth and knowledge, healthcare stakeholders—doctors, pharmacists, device manufacturers, etc.—will be put to the test in the near future. Long disclaimers and questionable pricing has put the pharma industry on its heels, as the public questions the motives and incentives of health insurance companies. We expect patient advocacy organizations like [Accolade](#) to gain traction and credibility, and we anticipate that highly regarded healthcare providers like the Mayo Clinic, Johns Hopkins and the Cleveland Clinic to be called upon as arbiters of truth.

In a world full of unknowns large and small, sources of misrepresentation are gaining steam. In the coming months and years, we anticipate a battle for truth, objectivity and perspective. We expect a dark road ahead.



Knowing 44% of American's use Facebook as a new source,¹⁷ the company launched

“FACEBOOK JOURNALISM PROJECT”

to give users trusted information.

CARE / OF

GETTING PERSONAL WITH PILLS

There's no end to the bottles, packs and pills of various nutritional supplements out there, but vitamin startup Care/of plans to stand out by **tailoring personalized vitamins to specific needs**. To ensure honest guidance and better ingredients of the vitamin industry, Care/of offers a designer box of pills curated to the user based on its smart algorithm search and Scientific Advisory Board. Standing out in an industry overrun with false labels, magic pills and asterisks, **Care/of is determined to provide accurate products to all consumers.**

BE A BEACON OF TRUTH

Manage the message and don't underestimate the power of press.

CREATE LONG-TERM 'SHIPS'

Cultivate and protect consumer loyalty. In this era, it is fleeting.

GET WITH THE TIMES

Upgrade your channels of communication to promote speed, agility and action.





HELLOWORLD

EVOLUTION OF COMMUNICATION WILL
CREATE NEW FORMS OF EXPRESSIONS

THE RAPID EVOLUTION OF COMMUNICATION WILL BE MORE THAN JUST TALK

The way that we humans interact with the beings and objects around us is evolving. The shift from analog to digital is creating new means, mediums and messages of communication.

We don't talk like we used to. Once taught to scribble cursive, we have quickly transitioned from snail mail to email to [Slack](#). We send eCards and "ping" our colleagues, replacing in-person encounters with virtual communiqués. New tools are reshaping the conversation.

In short order, the rotary phone made way for the dumb mobile phones and, ultimately, the smartphones. Our texts became in-app messages with emojis and voice notes; and text was replaced by video and (ironically) voice as the medium of choice. We've even harnessed our technological prowess to create the ability on Apple iPhones to send heartbeats and kisses.

Today, the world is our audience. Whereas the tools have changed how we communicate, cultural elements have redefined what we share with the world. We see

a newfound ability and willingness for self-expression, beginning with fully curated messages on [Instagram](#) and Pinterest, and evolving into raw and unfiltered messages on [Snapchat](#) and Facebook Live.

Once restricted to close encounters and one-to-one connections, we've unlocked group chat capabilities through [WhatsApp](#), and broad dissemination through social media. Openness has become the name of the game, and sharing (pictures, emotions and perspectives) is rampant. In one click, your most intimate thoughts and opinions can be spread quickly and widely throughout the world.

Of most significance, modern communication is bringing people and systems together in unforeseen ways. Today, we can more seamlessly interact with other cultures through advanced translation features. On Instagram, one click of the "translate" button and we instantly understand what someone from France, Israel or Taiwan is saying. But it doesn't stop there.

The growth of APIs is improving machine-to-machine communication, enabling the consolidation and curation of, for example, clinical and consumer data—or something we call the [Colossal Clash](#). Interoperability is making possible a world of opportunity by, at its core, aligning foundational building blocks of communication.

We may not be living like the Jetsons just yet—but the world is getting closer with every digital advancement.



GLOBAL PLATFORMS WILL EVOLVE TO GIVE A NEW INTERFACE TO COMMUNICATION

The evolution of three digital media is advancing human communication. Voice, virtual reality and video are gained steam at a rapid clip, reshaping modern interactions.

TALKING THE TALK

Voice is surpassing text as the interface and primary medium of the future. Talk is fast, easy, personalized and context-driven. For these reasons, voice-command bots, such as Apple's Siri, Amazon's Alexa and Microsoft's Cortana, are gaining in popularity. As speech recognition accuracy inches closer to 100 percent—increasing from 70 percent in 2010 to more than 90 percent in 2016¹—the percentage of smartphone users tapping voice assistants for daily chores has increased, hitting 65 percent in 2015.² Moreover, these bots are becoming more meaningful, integrating with home products like [Philips Hue](#) light bulbs and [Sonos](#) speaker systems. We expect this to be just the beginning.

A NEW REALITY

Virtual and augmented reality are changing the way humans interact with the world. New interfaces from [Oculus](#) (Connect 3), Google ([Daydream View](#)) and Samsung ([Gear VR](#)) hit the market in 2016 in a space

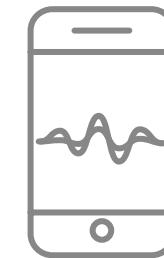
where estimated consumer spending is poised to increase from \$108 million in 2014 to \$22 billion by 2020.³

We expect these platforms to reshape countless industries, from education (see [Lockheed Martin Mars Experience Bus](#)) to treatment (see [BRAVEMIND VR Exposure Therapy](#)) to graphic design (see [Microsoft Hololens](#)). Once a videogamer's niche, virtual and augmented reality are going mainstream. Fast.

VIDEO GOES VIRAL

A sign of the times: in 12 short months, Snapchat, the video-sharing (and erasing) platform, has replaced Instagram as the go-to medium for self-expressions. For perspective, Snapchat's daily video views jumped from 2 billion in the first quarter of 2015 to 10 billion in the first quarter of 2016, with 10-20 million Snapchatters viewing live stories each day.⁴

YouTube chief business officer Robert Kyncl suggests that today, watching video is the third most time-consuming activity, behind only sleep and work.⁵ Whereas millennials communicate first and foremost with text, Gen Z is an image and video-based culture. We've entered a new paradigm: raw and personal content shared with the masses.



65% OF SMARTPHONE USERS

in 2015 tapped into voice assistance for daily activities.

VIABLE HEALTHCARE OPPORTUNITIES WILL BE BOTH WELCOMED AND DISCUSSED

Advancements in communication have significant ramifications. Crowdsourced tips successfully nabbed the Boston Marathon culprit. Social media and messenger applications catalyzed the Arab Spring. Healthcare is not immune.

A HUMAN TOUCH

Digital and virtual technologies are recasting how physicians, patients and caregivers communicate among and with one another. We are seeing telemedicine platforms like [AmWell](#) enable more convenient, cost-effective care at distance. Further, [Mercy Virtual's](#) clinical applications enable, for example, TeleNeurologists to assess and prescribe remotely, eSitters to monitor 4-8 times as many at-risk patients at a time and TeleICU to more rapidly alert nurses to deteriorating patients. Patients can now gain advice and guidance when they need it most, and physicians can more effectively follow up on patient adherence to medical plans. Finally, forums like [PatientsLikeMe](#) are providing a safe space for communal support.

MACHINE MEDICINE

We expect improved human-to-machine and machine-to-machine communication to advance healthcare outcomes. New interoperability standards, such as the Fast Healthcare Interoperability Resources (FHIR), will improve sharing of healthcare information electronically, allowing us to gain insight from the 1.5GB of data that each of us are expected to generate every day by 2020.⁶ Further, virtual assistance will become the first line of defense, acting as both multilingual healthcare navigators and as symptom-checking triage support. The way we use technology to interact with the world is evolving, with exciting possibilities abound.

Over the next 12 months, advances in communication and in digital interfaces will make our healthcare system more impactful, more seamless and more effective. The era of "all talk" is over.



New technological advancements such as
**AMWELL, MERCY'S
VIRTUAL CLINICAL
APPLICATIONS AND
PATIENTSLIKEME,**
are changing the way doctors, patients
and caregivers interact.

IMMERSIVETOUCH

A NEW WINDOW INTO THE HUMAN BODY

ImmersiveTouch is **changing the landscape of medical training and education** by providing augmented and virtual reality technology that displays full visualization of critical structures in the body. Medical professionals practice complex cases, and seasoned surgeons gain new visibility into anatomy. Doctors **achieve better outcomes** through enhanced precision, and now have the ability to plan procedures and train students with less risk.

SPEAK THE LANGUAGE

Engage with customers using contemporary means, mediums and messages.

ADD BELLS AND WHISTLES

Infuse voice, virtual and video into your customer experiences.

CONNECT IN NEW WAYS

Consider bridges with new communication platforms to meet your customers on their terms.





HUNGRY FOR CHANGE

AN APPETITE FOR CHANGE WILL GROW
EXPECTATIONS OF A BASE NEED

POLICIES AND PUBLIC SENTIMENT WILL SET THE TABLE FOR NEW CONSUMPTION REALITIES

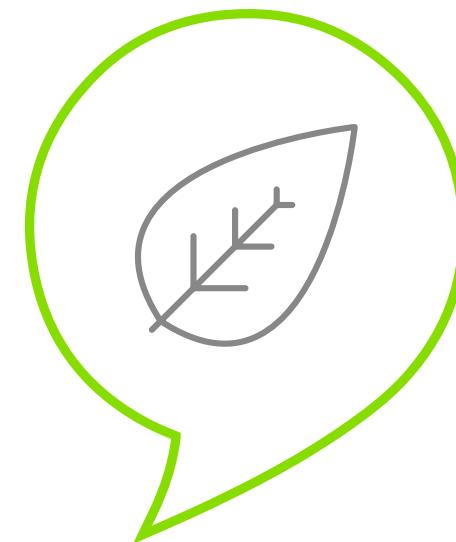
Together, global and local forces are posing new standards for portions and proportions, pushing out processed in favor of purity, and stocking up on function over form. Sugar is a good example. In 2015, the World Health Organization released new guidelines, staking claim that sugar should not account for more than 10 percent of daily energy intake. In 2016, the American Heart Association released the same guidelines.¹ Regulatory intervention can prompt us to make smarter choices and help us in the long run.

Taxing one penny per ounce of sugary drink could prevent an estimated 2.4 million cases of diabetes, 8,000 strokes per year and 26,000 premature deaths over the course of a decade.² Seven countries have instituted a tax on soda and sugary drinks. Mexico expects the tax will save 20,000 lives and \$980 million over 10 years by the cutting consumption.³ Twenty-eight states in the US have enacted a soda tax. After California enacted its tax, self-reported soda consumption dropped by 21 percent.⁴

People are changing their own consumption habits by choice. Consumers want fresh and unadulterated over packaged and processed. As a matter of fact, organic food sales have more than tripled in the past decade,

increasing 11 percent from 2014 to 2015.⁵ Today's cravings also include a desire for local foods straight from the source, with 92 percent of people saying they want to know where their food came from. As a result, farmer's markets are sprouting up like crazy, increasing by 76 percent since 2008.⁶ Labeling and ingredient simplification have also become a focus as people—especially millennials—seek clarity of food information.⁷

Some companies are beginning to respond to the clean food trend by pivoting to the new, trading in the old fan favorites with new offerings and messages that emphasize local, organic and transparent. Campbell's Soup devoted \$125 million in venture capital to invest in the future of food. They hired Sam Kaas, President Obama's former senior advisor for nutrition policy, and acquired companies like [Bolthouse Juice](#) and [Garden Fresh](#).⁸ Big food brands are gobbling up startups that deliver on consumers' appetite for change. And it's a feeding frenzy that shows no signs of weakening.



BEING HEALTHY WILL MEAN EATING HEALTHY AND FUEL A NEW HUNGER FOR FUNCTIONAL FOOD

There is growing interest in the health-enhancing roles of foods, where the focus goes from eliminating foods to adding specific ones. Consumers are consciously searching for foods to meet personal needs. They want to be educated on the impact of each ingredient on one's body, and how to optimize their diet in order to look and feel their best.⁹

Overall, there is massive growth in consumers searching the web for health-related topics such as "health stores near me" (280 percent growth), gluten-free foods (140 percent growth) and for vegan ice cream (109 percent growth).¹⁰ As just one example of the growth in functional food, turmeric is now the number one searched food on Google, likely due to its touted health benefits.¹¹ Today, you go onto YouTube, and a turmeric health benefits video will have 3.9 million views.¹²

HEALTHY WITH A SIDE OF FUNCTIONAL

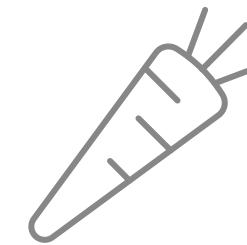
People have acquired a taste for food alternatives as we get smarter around form and function of food. Plant-based meals that focus on vegetables, whole grains and legumes are increasing in popularity. The Zoodle craze has put an abundance of spiralizers on the shelves, and

cauliflower rice is becoming a new favorite, a welcome substitute for carbs on many American plates.

A growing cohort of companies, such as [Memphis Meats](#), produce real meat from animal cells, without feeding, breeding or harming animals in the traditional sense. Creepy, but cool.

A NEW RECIPE FOR FOOD INDUSTRY HEAVYWEIGHTS

Weight Watchers is making major plays. Did you know this popular weight loss plan is now covered as an employee benefit? In addition, Weight Watchers has launched a diabetes prevention program—like clinically acclaimed [Omada](#)—truly marking their transition into a healthcare company. Weight Watchers is now more than Saturday morning weigh-ins, point counting parties and tasty low-cal treats. Nestle is getting in the game as well. They recently opened a research institute dedicated to investigating food's role in the prevention of disease.¹³ Food companies will continue to transition into healthcare companies as food becomes a greater input into improving overall health.



Weight Watchers is now
covered as an

EMPLOYEE BENEFIT

in some companies.

DIGITAL APPROACHES WILL BOTH AID SOCIETAL CURIOSITY AND FULFILL ON-DEMAND CRAVINGS

New tools will satiate cravings on intel for what to eat, understand where food is from and how it impacts our body. For instance, with image analysis, counting calories will never be the same. Google's AI-powered Im2Calories uses image recognition to estimate the calories in your food.¹⁴ Weight loss app Lose It! is also enabling snack selfies, touting a 97.1 accuracy percent rate.¹⁵

CONSUMERS WANT TO EAT HEALTHY—AND THEY WANT THE FOOD QUICKLY

On-demand health food services will extend to the masses, refreshing society's perception of fast food. Funding in such businesses is heating up. And grocery delivery services like [Instacart](#) are outpacing meal delivery. Similar services like [Plated](#) and [BlueApron](#) will deliver farm-to-table meal kits right to your door. After a long day at the office, having all the right (and the exact amount of) ingredients prepped and ready to go, makes it a lot easier to turn down that pizza delivery. Grocery delivery startups had 136 funding deals in 2015, compared to 125 meal delivery deals.¹⁶ According to Accenture's [Healthcare: For Here or To Go](#) report, food tech made up 10 percent of on-demand funding in 2015, totaling roughly \$1.25 billion.

DELIVERING FOOD FOR THE BODY AND SOUL

New services will emerge out of clinical necessity, serving curated meals coupled with coaching. Food will play a crucial role in the pivot from healthcare to life care. For example, [Humana Well Dine](#) delivers meals for COPD and chronic heart failure patients. Already companies like Meals on Wheels deliver more than just food.

Seniors who receive daily meals show improved mental health, fewer falls, improvement in self-rated health, improvement in feelings of isolation and loneliness, and reduction in worrying about living at home.¹⁷ Food delivery services will also give rise to a new form of caregiving and companionship. An Oxford study showed that elders receiving home delivered meals reported lower levels of loneliness than the control group. And those receiving meals once a day reported lower levels of loneliness than those receiving meals once a week.¹⁸ Now that's taking comfort food to a whole new level.



FOODTECH

garnered \$1.25B in investment
in 2015, or 10% of total
on-demand funding.¹⁶

MEMPHIS MEATS

PUTTING CONVENTIONAL MEAT PRODUCTION OUT TO PASTURE

Consumption of animal products brings the baggage of environmental degradation, a slew of health risks, animal suffering and more. As society shifts to a mindset of knowing the background and composition of their food, **the food industry is increasingly shifting toward animal-friendly practices**. Three scientists at Memphis Meats created quality lab-grown meat from animal cells in a culture without the need to feed, breed and slaughter actual animals.

CHAMPION CHANGE

Work collaboratively to help shape the rapidly changing regulatory environment.

DO A BODY GOOD

Proactively reimagine functional foods as a form of healthcare treatment.

SPICE THINGS UP

Differentiate by baking these new and novel approaches into health offerings.





LIFE IN THE FAST LANE

IMAGINATIONS WILL SOAR TO
ADVANCE MOBILITY REALITIES

PASSENGERS WILL RIDE DOWN NEW AVENUES AND ACCELERATE ONTO UNPAVED ROADS

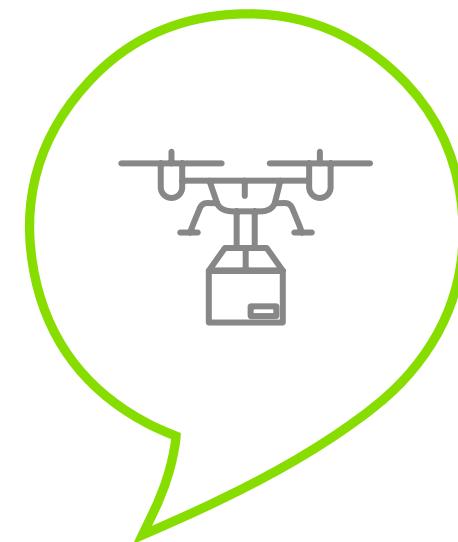
Paradigm shifts are occurring across planes, trains and automobiles. Modern forms of transportation are being reimagined, and new opportunities are rapidly emerging, reshaping how the world gets around.

The train you ride to work, the car you drive, the plane you fly on and the boat that ships your goods are all undergoing makeovers. Trains today are picking up steam, becoming safer, faster and more digitally enabled. For example, German railway company Deutsche Bahn is creating an "Innovation Train" that features augmented windows with touchscreen data overlaying passing scenery.¹

Our passenger vehicles and commercial trucks are more connected, quantified and automated than ever before (and they're increasingly running on electricity as well). Moreover, the sky is no longer the limit for planes equipped with enhanced logistical systems, made of new, more fuel-efficient material and powered by alternative energy sources. Already, [Airbus](#) is using 3D printers and composite materials to more efficiently manufacture stronger and lighter planes. And finally, our ships, too, are enhanced with better fleet management techniques and new propulsion systems.

But the true excitement lies in emerging methods and purveyors of transportation that are quickly taking off. Unmanned aerial vehicles and drones are gaining altitude, as companies like Amazon began trialing drone deliveries this past year.² Further, futuristic forms like Elon Musk's "Hyperloop" are capturing the imagination of many, promising supersonic travel through vacuum-sealed pipelines.³ More importantly, the transportation industry is drawing interest from non-traditional players. Among those in the driver's seat: technology-first companies like passenger hailing service Uber (which acquired self-driving truck manufacturer Otto⁴) and... go figure... Amazon (which bought 40 cargo planes to speed deliveries and gain better control of its logistics operations).⁵

As the industry continues to evolve, one thing is clear: technology will be the ticket to the future of transportation.



NEW AUTO MODELS WILL REIMAGINE EXPECTATIONS AND BECOME A REALITY

Advancement in the transportation industry is being driven by technological development, the emergence of multi-sided platforms and shifting business models.

PROGRESS, HARD AND SOFT

Digital technologies are finding their place in today's vehicles. Improvements in hardware and software are enabling autonomy, connectedness and efficiency that will open the door to exciting possibilities. Our vehicles are nearing the point where they can drive themselves (to say nothing of our planes and boats, which rely almost entirely on autopilot).

Case in point, Mercedes-Benz vehicles are automatically changing lanes for drivers on multi-lane highways.⁶ Some Lexus models have in-car cameras that detect and reduce drowsy driving behaviors, and parking and lane-changing assistants have all but eliminated blind spots.⁷ Finally, a proliferation of sensors is allowing us to optimize performance of both individual units and entire fleets. As part of its emphasis on the "Digital Industrial," GE now improves fuel efficiency of its trains and airplane engines while monitoring for the first sign of breakdowns.

STEPPING ON THE PLATFORM PEDAL

Multi-sided platforms are changing delivery of goods and services by effectively curating supply and demand. [Uber](#) and [Lyft](#) are household names because they seamlessly cater to both drivers and passengers while reducing overcapacity. Further, this on-demand economy is growing rapidly; investment in healthcare services alone is expected to quadruple from 2015 to 2017 to nearly \$1 billion annually.⁸

SHIFTING BUSINESS DYNAMICS

Moreover, business models, common practices and industry dynamics are changing quickly. For example, disintermediation is hitting the auto industry, with companies like Tesla seeking direct-to-consumer arrangements that eliminate the traditional dealership.⁹ What's more, new collaborations and partnerships are forming, leading to broader geographic reach, economies of scale and more favorable capital expenditure arrangements. For example, freight shipping companies are joining forces with container leasing companies to reduce overhead costs associated with maintaining a container fleet.¹⁰

With technology, competition and business model creativity at its back, the transportation industry is poised for radical change in the next three to five years.



investment in healthcare services alone is expected to
QUADRUPLE
from 2015 to 2017 to nearly
\$1 billion annually.

MANY WILL BE DRIVEN TO ADDRESS EMERGENT AND NON-EMERGENT TRANSPORTATION

The healthcare industry is positioned to benefit tremendously from advances in transportation. Across emergent, non-emergent and medical goods, the path from point A to point B has never been this exciting.

New forms of non-emergent transportation are changing where and how healthcare is delivered. Need a flu shot but don't have time to run to the doctor's office? UberHEALTH will come to you.¹¹ Hoping a board-certified physician might take a look at a condition you think may be urgent? Hail [Dispatch Health](#) for a tenth of the price of an emergency room visit. Having trouble making it to your doctor's appointment because you don't have means of transportation? HIPAA-compliant platform [Circulation](#) has you covered.

These services not only help improve outcomes, but they address critical barriers to healthcare. Consumers stand to benefit tremendously from the increase in access, convenience and cost-effectiveness. The opportunity in non-emergent transportation, for both companies and consumers, is tremendous.

But it doesn't stop there; emergent transportation is also getting a facelift. Within the US, public health programs like Medicare are combatting rising costs and fraudulent

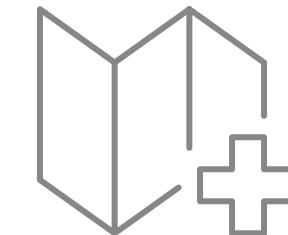
billing from ambulance companies.¹² Consumers are taking notice of skyrocketing transportation bills and turning to alternatives, like retail and urgent care clinics.

MEDICINE ON BOARD

Healthcare supply chains are being redrawn based on faster and more efficient first-mile and last-mile capabilities. Domestic and international distribution of medical supplies have seen broader and more timely reach, touching all corners of the globe through new and novel methods.

For example, in the US, a startup called [Flirtey](#) is using drones to deliver medicine to a rural Virginia health clinic.¹³ FedEx and UPS have made multi-billion dollar acquisitions of European parcel delivery companies and pharmaceuticals distributors to capture a share of the drug distribution and clinical trials market.¹⁴ Even intra-facility transportation has also gone high-tech, with companies such as [Wilstair](#) using intelligent drones to deliver—and track—supplies between floors of hospitals.

We expect the way that people and goods move throughout the world to rapidly evolve in the coming years. With modern modes improving and new means emerging, the sky is truly the limit.



New services such as Dispatch Health and UberHEALTH

IMPROVE OUTCOMES

while address critical barriers to healthcare.

ZIPLINE

GETTING CRITICAL SUPPLIES TO REMOTE LOCATIONS

Zipline was created to **deliver vaccines, medicine or biomaterials** through small robot airplanes to address challenges of 2 billion people lacking adequate access to essential medical products. The process is simple; a health worker places an order by text message and a Zip plane lands at an open space near the health facility within minutes. **Zipline began with a partnership with the government of Rwanda** to deliver products for 20 hospitals. Zipline has plans to launch similar delivery programs to remote locations in the US.

DECONSTRUCT DELIVERY

Re-evaluate the approach and role of transportation in delivering services.

MAKE INROADS

Establish transport strategies across emergent and non-emergent services.

PAVE PATHS WITH PARTNERS

Activate digital-first partnerships with on-demand service organizations.





BETTER WITH AGE

LONGEVITY WILL BE THE FORMULA
THAT FINALLY COMES OF AGE

AGING POPULATIONS WILL CAUSE SOCIAL, ECONOMIC, AND ETHICAL WRINKLES

It is a paradoxical time for our global population. The steady, yet gradual, aging of civilization threatens economic growth in emerging economies while portending social strife in developing nations. In our lifetime, maturing populations will reshape society, for better and for worse.

Society is projected to grow older over time, with stark differences across developed and developing regions. Overall, the global population 65 and older will jump from 8.5 percent today to nearly 17 percent by 2050.¹ And while developing nations are seeing higher birth rates and fewer deaths, developed economies are playing host to diametrically opposing factors. Whereas Pakistan's population is projected to increase 50 percent by 2030, Japan's population lost one million people between 2010 and 2016² and the US is growing at its slowest rate (0.7 percent) since the Great Depression.³

The aging phenomenon will have wide-ranging economic, social and cultural implications. The United Nations estimates that 48 countries will see their populations decline by 2050, threatening economic

growth and vitality.⁴ As the developed world's workforce shrinks as a proportion of the total, societies will buckle under the weight of entitlements programs (e.g., pensions, Social Security) and sluggish growth.

Conversely, swelling working age populations in developing regions like sub-Saharan Africa, the Middle East and Southeast Asia are growing faster than society can absorb and employ them. Western countries are beginning to feel the pain, as youth unemployment in places like Spain hovers around 45 percent,⁵ creating social strife and populist uprisings positioned to upset stability.

As societies rapidly expand or contract, our problems only grow. Entire communities are confronting several key questions: Do we have the resources to support populations living longer? Do we have the structural capacity to absorb swelling populations? And how long can people live high-quality, healthy lives before the systems supporting them buckle under the burden?



ADVANCES IN SCIENCE AND MEDICINE WILL LENGTHEN OUR GOLDEN YEARS

The quest for the fountain of youth is in full swing. Today, scientists are pursuing a golden opportunity to increase longevity for a growing proportion of the population. And while global life expectancy is projected to increase by almost eight years between 2015 and 2050 (climbing from 68.6 to 76.2), the medical community isn't settling for less than 150.⁶

The [Palo Alto Longevity Prize](#), for example, awards \$1 million to the scientist(s) who can to "hack the code of life." In the private sector, Google's [Calico](#) aims to use advanced technologies to explore aging and devise interventions that slow the aging process and counteract age related diseases. In our lifetime, 150 will be the new 80.

A SILVER LINING FOR SENIORS

Science and technology will be the mechanisms for making quadragenarians out of octogenarians. If living to 100 was a 20th century ambition, living well (healthy and actively) into one's 150s will be a challenge of the 21st century. Advanced societies are quickly enabling elderly populations to live independently, more easily manage their health, and maintain social connections through GPS technology (e.g., [PocketFinder](#)), health tracking

devices (e.g., [Lively](#)), and home-assistive devices (e.g., [MedMinder](#)). However, this is just the beginning.

Companies like [Unity Biotechnology](#) are combatting ailments afflicting the elderly—from arthritis, heart disease, kidney failure, loss of eyesight and hearing loss—by developing therapeutics that prevent, halt or reverse aging at the cellular level. The challenge—one that we see achieved in the coming years—will be to both extend and enhance the livelihoods of our elders.

RE-CONCEIVING EARLY LIFE

Science and technology will serve those young and old, impacting aging across the spectrum. We expect technology to birth a renaissance of life. The global assisted reproductive technology market alone hit \$22.3 billion last year, and is expected to reach \$31.4 billion by 2023.⁷ Wearables, like [Ava](#), deliver real-time fertility information, allowing couples to conceive faster. There are also breakthroughs to support maternity and post-partum—such as [Naya Health's](#) smartphone-connected breast pump startup and companion app that allow moms to track pumping sessions and manage breast milk inventory. [Owlet](#) makes a smart sock

and companion app for babies that tracks heart rate, skin temperature, blood oxygenation and sleep data, transmitted to the cloud and accessible through the parent's smartphone, or any other connected device. Advances on all fronts mean far fewer sleepless nights for current and aspiring parents.



Living well
(healthy and actively)

INTO ONE'S 150s

will be a challenge of
the 21st century.

MORE COLLABORATIVE EFFORTS WILL ADDRESS THE START OF LIFE AND END OF LIFE

Tomorrow, the phrase “act your age” will carry very different meaning. A new era is dawning and with it a new set of expectations for those at the beginning and end of life. As society matures, the way we interact with and embrace aging will be reimaged.

DELIVERING RETURNS

It's time for countries to deliver better fertility, maternity and childcare services. This begins with education and training. Efforts like [CMS' Strong Start for Mothers and Newborns](#) will begin to tackle issues such as early elective C-section. But it goes further; financial support for this period of life will also change. In the US, most health plans do not cover fertility, despite one in six couples struggling with infertility and clear societal benefits associated with combatting sluggish population growth. Fortunately, global investment in fertility and maternity is set to increase, with “femtech” jumping from \$29 million in 2014 to \$82 million through three quarters of 2015.⁸

ALL'S WELL THAT ENDS WELL

We expect new models for long-term, palliative and hospice care to mature, as infrastructure, expertise and experience increase. Specifically, we will see progress in advocacy, training and sustainability. Societies will better acknowledge living conditions of their elderly, they will clarify and improve the reach of best practices, and they will improve the economics such that organizations may continue fighting the good fight for years to come.

A GROWING TENSION

In the coming years, we anticipate that tension will increase with regard to managing the beginning and end of life. At the center of this debate will be two key issues: abortion (managing beginning of life) and elective euthanasia (managing end of life). Humankind's struggle with these difficult questions will only grow as movements gain steam, perspectives evolve and economic, societal and cultural arguments reach the mainstream.



“FEMTECH,”

global investment in fertility and maternity, has increased to \$82 million in 2015.

ASPIRE HEALTH

RIGHT CARE AT THE RIGHT TIME

Patients facing serious illness often receive care that is uncoordinated, unnecessary and generally not aligned with their goals and values.

Aspire Health uses **algorithms to focus on those who are seriously ill** to assess which patients will pass in the next year. By channeling these patients to palliative care, the firm reduces medical bills by an estimated **\$10,000 per patient** while improving patient quality of life across 20 states.

THINK WISELY

Revisit your understanding of the demographics among the customers or communities you serve.

GO FULL SPECTRUM

Create offerings focused at the start and end of life, where costs are concentrated and lasting loyalty earned.

PUT AGING ON THE AGENDA

Work with others to shape global policies that address current and emerging aging challenges.





AU NURTUREL

NATURE VS NURTURE DEBATE
WILL BE FURTHER UNZIPPED

GENOME PROJECTS WILL BECOME DEMOCRATIZED PRACTICE AND A MEDICAL REALITY

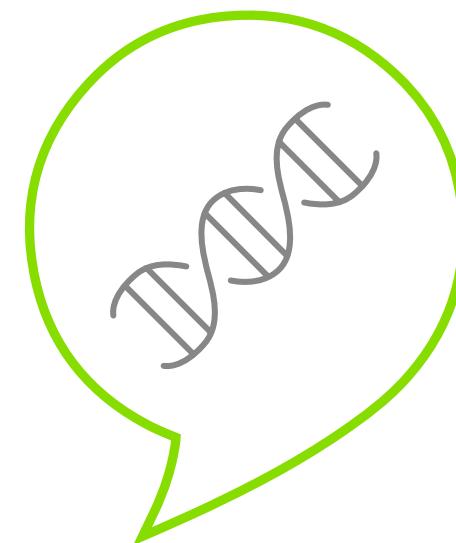
There has been dedicated investment by governments to spur genomic innovation. Let's rewind to 1990, the birth of the Human Genome Project and the beginning on the genetics movement. In collaboration with seven other countries, the US National Institute of Health launched \$1 billion research initiative. There started the most monumental research collaboration in history and researchers around the world set out to sequence the nucleotide base pairs that constitute human DNA. Thirteen years later in 2003, the project had successfully mapped 99 percent of the human genome.¹

Science continues to unearth new discoveries in the field, advancing from pure sequences to deeper specialty areas. And progress is happening worldwide. Saudi Arabia launched the [Human Genome Program](#) focused on recessive genetic diseases impacting the Saudi population, such as cancer and environmental factors. Similarly, the UK launched [Genomics England](#), which aims to map 100,000 whole genomes by 2017, focusing on rare disease and cancer. China launched a \$9.2 million, 15-year precision medicine initiative in 2016.² Lastly, the United States has a \$215 million

Precision Medicine Initiative that promises to accelerate biomedical discoveries and provide clinicians new tools, knowledge and therapies.³

A number of private organizations are hopping on the genome-wagon, focusing on the democratization and consumerization of innovations—and it is happening in a big way. Back in 2003, science spent \$1 billion to sequence the genome. By 2015, sequencing an individual's genome cost only \$4000. And by 2016, the price had dropped to only \$1,500.⁴ Nowadays, customers can pick up a [23andMe](#) ancestry kit for just \$99 to learn details about their physical attributes and insights into whether they are potential carriers for specific diseases.⁵ Genomics has also made its way into the doctor's office, where companies like [Foundation Medicine](#), which has received \$90 million in funding to date, created a genetic profile test that sequences cancer genes to help oncologists chose drugs and treatments based on the cells genetic profile.⁶

Market players will look to modify, edit and configure our genetic recipes for the better, making genetic modification and n=1 treatment the next area of focus.



SOME WILL RELY ON THEIR GUT TO RIDE THE NEXT WAVE OF ADVANCED GENOMICS

The microbiome will become a large piece of the genetic equation. Our body is home to trillions of microbes that outnumber our own cells 10 to 1. Science is showing that these microbes, collectively called the microbiome, play a pivotal role in our health.

Health nuts are quickly jumping on board the microbiome train – hence why kimchi and kombucha are now all the rage. These communities of critters may, in fact, be more indicative of and influential to our health than our own DNA. Our microbiome is both an indicator and influencer of our immune system, emotional wellbeing and physiological state. Microbes are linked to obesity, autoimmune disorders, circadian rhythm, diabetes and depression, as an example. The microbiome is quickly becoming genomic community's new golden child, with new research initiatives quickly sprouting up – like the [NIH Common Fund Human Microbiome Project](#), the White House Office of Science and Technology [National Microbiome Initiative](#), the [Canadian Microbiome Initiative](#) and the [Metahit](#) initiative, to name a few.

MOVING BEYOND GUT INSTINCTS

There is growing evidence that taking steps to alter our microbiome can benefit our health. As an example,

the consumption of probiotics (living microorganisms – consumed as a supplement or through things like kombucha) can help to treat, and even prevent, some illnesses. As another example, fecal transplants are being used to move the microbiota from a healthy person's into a sick person's gut. A study in the Netherlands showed that when patients with metabolic syndrome received a microbiota transplant from a lean gut, the recipient's sensitivity to insulin dramatically improved.⁷

THE MICROBIOME GOES MAINSTREAM

Startups and innovators will continue to tackle the 'second genome' from all angles. For example, [Azitra](#) is developing a microbiome-based platform to treat a variety of skin diseases, including eczema and psoriasis. [Enterome](#) is working to treat Crohn's disease, ulcerative colitis and irritable bowel syndrome. [uBiome](#) has a platform, SmartGut, designed to sequence and identify the DNA of both healthy and disease-causing gut microbes. Numerous companies, such as [ISOThrive](#), are producing products to supplement or modulate the gut microbiome.⁸ The consumer side of things is set to explode as well. Analysts predict that the probiotics market will grow to \$64 billion by 2024.⁹ Gut-friendly

foods are taking off, too. The kombucha market is expected to grow from 600 million in 2015 to \$1.8 billion by 2020, representing a 25 percent CAGR.¹⁰ As always, we must be cautious before indulging in the craze. Since many probiotics are sold as 'dietary supplements,' the FDA does not need to regulate them, unless they are marketed as a drug for a specific disorder.¹¹ Proceed with caution.



Analysts predict that the probiotics market will grow to

\$64 BILLION BY 2024.

UNRESOLVED BIOETHICAL CONSIDERATIONS WILL QUICKLY ARISE AND HINDER GROWTH

New abilities are allowing us to override fate to customize new and existing life forms. As mentioned earlier, genetic manipulation has become a near-term reality with the acceleration of genome editing technologies such as the CRISPR, ZINC and TALENS. That means we are a few steps closer to reversing that cancer gene or curing that autoimmune disorder. It also means we are one step closer to facing an age-old biological debate of nurture vs. nature.

The reality is that science is evolving faster than society's ability to consume and institutionalize it. Think 'child-by-design.' It may start with harmless change-ups, like blue eyes over your destined brown. But where does one draw the line? How far can we force fate's hand? And what will it mean to live in a world where the wealthy and successful can embark on a continuous betterment loop, breeding generations of ever more impressive super humans? How are we to manage the inevitable societal divide that will result? A once-distant slippery slope is now a reality.

GENOMIC ADVANCEMENT WILL GIVE BIRTH TO NEW PRIVACY CONCERNs

We all have lived through the debate around pre-existing conditions and what that means for your insurability. Just think of the discrimination and drama that could unfold in employment and insurance when everyone can learn about anyone's risk factors. A whole new set of questions will quickly arise. Who owns the data? When we get bad news, what obligation does a person have to share that data with their employer or health insurance company? And what could and should an insurance company do with that information? As always, with great power and knowledge comes great responsibility.

ADDRESSING BIOETHICAL CONSIDERATIONS

No one can deny the great unknown that is genomics medicine and the broad impact it will have on the human race. Policymakers and thought leaders are stepping up to formally ignite the debate and form answers to the already looming, rapidly approaching questions. In 2015, the National Academy of Sciences and National

Academy of Medicine announced that it would convene an international summit, bringing together researchers and other experts to explore the scientific, ethical and policy issues associated with human gene-editing research.¹² And the Human Genome project founded an Ethical, Legal, and Social Implications program to identify and address issues raised by genomic research that would affect individuals, families and society.¹³

As expected, the debate will not be an easy one. Progress to date implies that global consensus will be nearly impossible. Take the US and England, for example. In 2015, the NIH released a statement saying that it would not fund any use of gene-editing technologies on human embryos, only living organisms.¹⁴ Then, in 2016, the UK's Human Fertilisation and Embryology Authority announced it had granted permission for a London-based research team to edit the genomes of human embryos. #drama¹⁵

The growing availability and use of genetic testing and exploration will continue to spark debate as scientists—and policymakers—embark on uncharted territory.

CRISPR

A GAME-CHANGING GENETIC ENGINEERING TECHNOLOGY

CRISPR (Clustered Regularly Interspaced Short Palindromic Repeat) is a unique technology that enables geneticists and medical researchers to edit parts of the genome by **removing, adding or altering sections of the DNA sequence**. Currently known as the simplest, most versatile and precise method of genetic manipulation, the CRISPR-Cas9 system consists of two key molecules that allow for **gene splicing and editing through a change mutation**. CRISPR's future potential hints at serving as a cure to common genetic diseases.

GROW TOGETHER

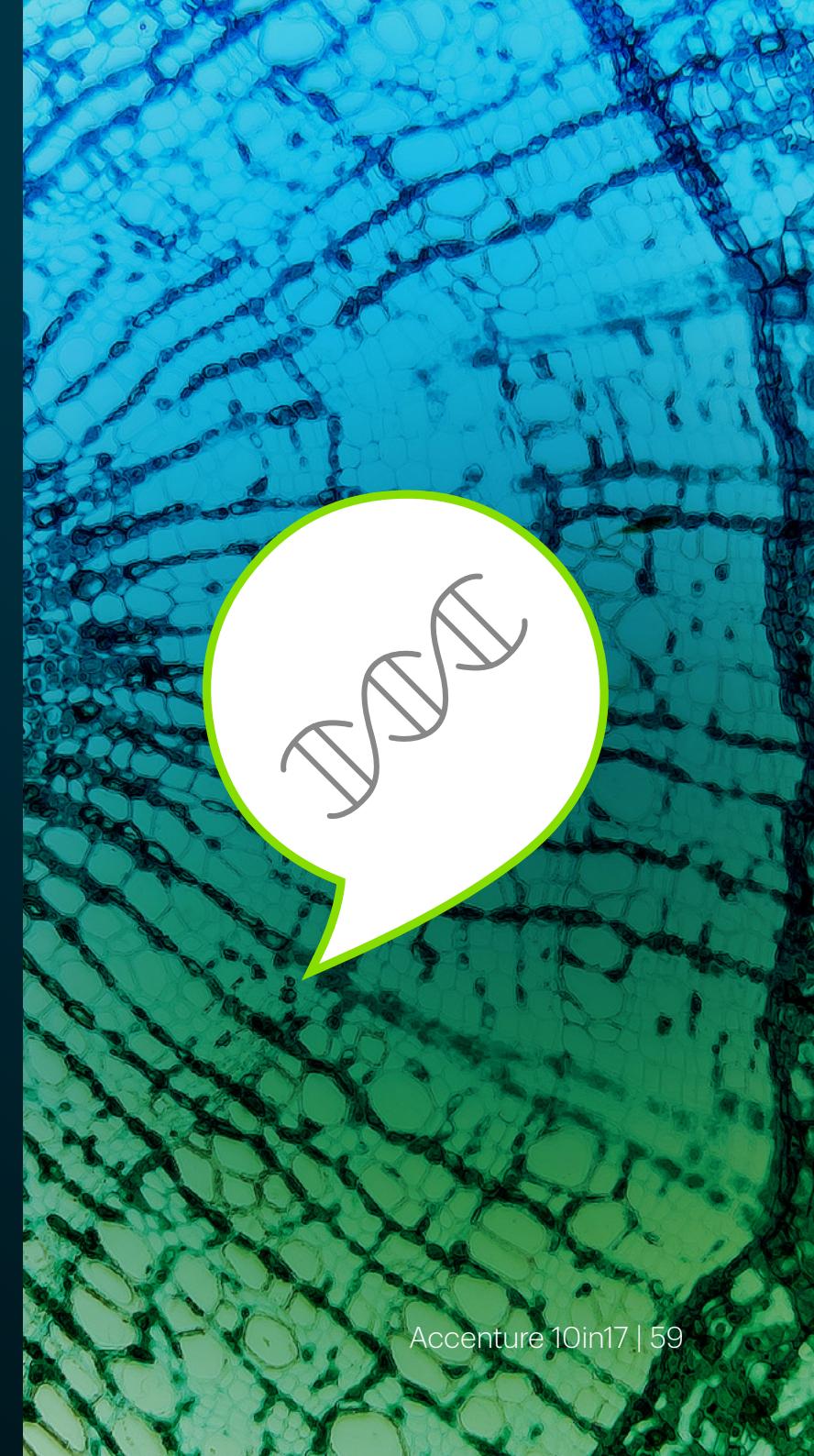
Collaborate to further democratize new realities and drive continued advancement.

GO WITH YOUR GUT

Get smart on the microbiome and explore creative strategies to incorporate new offerings.

SET PARAMETERS

Take measures to control the pace of innovation and ensure protection of information.





NAMASTE FLY

MINDFULNESS WILL BE THE
MOVEMENT THAT TAKES OFF

SHIFTING MINDSETS WILL ACCELERATE THE FOCUS FROM HEALTHCARE TO TOTAL LIFECARE

In today's #ExperienceEconomy, society is on the pursuit of 'something more.' Our view of success is no longer just defined by having a prestigious job, driving the best car or making bank. Millennials no longer glorify 'the grind' of previous generations. Consider this: In 1990, Wall Street analysts stuck it out for 30 months on average; in 2015, analysts stayed nearly half the time, relinquishing their once-coveted titles after only 17 months.¹

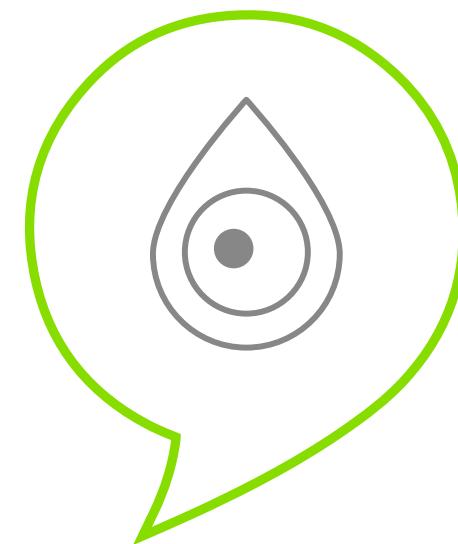
In this new era, we are all in search of deeper meaning. We want to find our calling in life, ignite our passions, connect with the universe and set the world on fire. Just take a look the top new year's resolutions in the US this year: 'living life to the fullest' came in at number three (up 13 percent from last year), right behind all-time fan favorites 'getting healthy' and 'getting organized.'²

In turn, the mindfulness movement is no longer reserved for the hippies and the housewives. Many are in search of that spiritual awakening. First, we jumped on board the yoga train. In 2016, 36.7 million people practiced yoga, up from 20.4 million in 2012.³ Last year, we spent \$16.8 billion on yoga classes, clothing, equipment and accessories.⁴ Now, we are all about the meditation life.

Twenty million people tried meditation in 2016.⁵ Studios like Manhattan's MNDFL are popping up all over the place, where for \$2,200 a year, urbanites can come retreat, reflect, recharge and re-center to be ready to take on the world.⁶

A new wave of services will accelerate the movement, making it more accessible and attractive to all. Digital tools will make easy for us to get our 'Om' on anytime, anywhere. Take [Headspace](#), which has raised nearly \$40 million in funding to date and 6 million users in 2016.⁷ Its platform provides guided meditations that are only 10 minutes long, and launched right from your phone.

Travel and tourism are also getting in the game, taking the restorative qualities of a 'vacation' to a whole new level. Next-gen wellness retreats ranked No. 3 among rising lifestyle blog [WellandgoodNYC](#)'s top trends for 2017, behind 'inflammation-fighting foods' and 'workleisure, the new athleisure.' As productivity proof points take shape, corporate entities will continue to step up. In 2016, 22 percent of employers offered mindfulness training, a percentage that could double in 2017.⁸ Mindfulness is officially going mainstream.



PHYSICAL, MENTAL, AND EMOTIONAL INDICES WILL BE DETERMINANT OF WELLBEING

We are already learning to stretch our definition of health to combine body + mind. Just as we have a fresh perspective on life, we are also changing the way we think about our health. It's no longer about avoiding illness or curing sickness – it is about being well and staying well, about reaching your optimal state so that we, as humans, can thrive and achieve our truest potential.

As a first step, behavioral and physical health will go increasingly hand-in-hand. Science already shows the link between our physiological state and our psyche. Consider a few examples. People with type II diabetes are twice as likely to have depression than the general population; on the flip side, people with depression are twice as likely to suffer from Chronic Obstructive Pulmonary Disease (COPD) or have a heart attack.⁹ Just think if we could turn that link to our advantage, treating the physical alongside the mental to elevate outcomes across the board.

MINDFUL MEDICINE

Clinicians are even adding wellness practices to their prescription pads. Functional medicine doctors at [Parsley Health](#) are recommending yoga and meditation to patients because these are natural, scientifically proven ways of combatting stress levels and regulating hormone levels.¹⁰ Another example is the Patient-Centered Primary Care Collaborative, which touts the benefits of integrating behavioral health as part of the patient-centered medical home.

NEW MODELS PROVE THAT THE 'WHOLE' IS GREATER THAN THE SUM OF ITS PARTS

When we add mindfulness to the mix, outcomes are improved and experiences are enriched. For example, people who have suffered three or more depressive episodes see the risk of relapse reduced by almost half after mindfulness-based cognitive therapy (MBCT).¹¹ In addition, heart attack patients who are treated for depression experience lower rates of mortality and re-hospitalization.¹²

There is growing evidence that suggests participation in mindfulness-based interventions (MBIs) contributes to reductions in psychological distress, sleep disturbance and fatigue, and promotes personal growth in areas such as quality of life and spirituality. MBIs may also influence markers of immune function, hypothalamic–pituitary–adrenal axis regulation and autonomic nervous system activity. Sounds like the proof is in the pudding.

UNIQUE COMBINATIONS OF COMPLEMENTARY AND ALTERNATIVE APPROACHES WILL TOUCH DOWN

Ancient remedies will be revived for a massive global comeback. Have back pain? Forget the prescriptions and quarterly check-ins in sterile, cold examination rooms. Imagine your doctor instead prescribing yoga, followed by a deep tissue massage, or maybe a little acupuncture? If it was good enough for Ancient Romans, isn't it good enough for us? As of late, society agrees. In fact, Americans already spend \$30 billion a year out-of-pocket on complementary health approaches.¹³ In 2015, the alternative health market, which includes things like acupuncture, naturopathy and herbal therapy – was sized at \$15 billion and showed 6 percent growth between 2011 and 2016.¹⁴

HIPPIE IS BECOMING THE NEW HIP

Unconventional interventions once wrote off as 'woo-woo wellness,' will now be warmly embraced. People are donning pink sparkling rocks, adorned with healing crystals said to emit positive energy and establish equilibrium.¹⁵ Or consider the cryogenics craze – people voluntarily stepping into a -240°F chamber as a way to lose weight, halt aging and reduce inflammation.¹⁶

Cannabis is also making a comeback, with more than half of Americans (53 percent) on board with legalization

of marijuana.¹⁷ Medical marijuana has already been legalized in 28 states.¹⁸ Cannabis supplements are being used to combat anxiety, pain and malaise, to improve skin and help with pre-menstrual syndrome symptoms. Some will give chase to the Green Rush. However, we cannot get ahead of ourselves. We must uphold these 'new and novel' approaches to the same scientific standards as the old-school favorites. Take a deep breath, relax and go slow.

'HEALTHCARE' AS WE KNOW IT WILL BE TURNED UPSIDE DOWN

Alternative, complementary approaches are showing positive results. Acupuncture, massage and yoga are helping patients with back pain. Acupuncture and tai chi are improving osteoarthritis of the knee. Relaxation is helping people manage migraines. Consumers are going there, whether healthcare is ready or not. Proof points are, and will continue to, emerge. So what does that mean for today's big dogs on the healthcare campus? Expand our aperture, embrace the change and dive on in.

The light within me honors the light that shines within you. Stay fly. Peace out.



Americans spend
**\$30BILLION
A YEAR**
out-of-pocket on complementary
health approaches.

PALM HEALTH

GOOD HEALTH—HEAD TO TOE

PALM (Personalized Advanced Lifestyle Medicine) Health in St. Louis, Missouri, is an **integrative wellness center** that offers medical, naturopathic, fitness, coaching and spa services designed to transform lives. A team of neurology, rheumatology, cardiology, family medicine, primary care, psychiatry, fitness specialists, exercise physiologists, chiropractors, massage therapists, estheticians and well-being coaches provide **highly personalized, advanced preventive care and treatment**. State-of-the-art facilities are where people go to discover everything they need to attain, regain and sustain health.



THINK FULL CIRCLE

Reorient your consumer experience strategy to emphasize mind, body, and soul.

CRYSTALIZE CONNECTIONS

Collaborate to build innovative integrated care models that deliver differentiated outcomes.

BE FLEXIBLE

Welcome alternative or complementary approaches to navigate out in front of impending change.



$$20|10+7 = 2017$$



BREATH OF FRESH AIR

Continued exposure to hazardous toxins will elevate environmental focus.



TROUBLED WATERS

Global efforts will aim to bridge divides and ensure access to safe water.



GOOD NIGHT

Non-traditional organizations will bring light to the dark side of our lives.



STREET SMARTS

Connected homes will be but small inputs into broader intelligent ecosystems.



INTANGIBLE TANGIBLES

Intellectual property will be the modern physical currency of corporations.



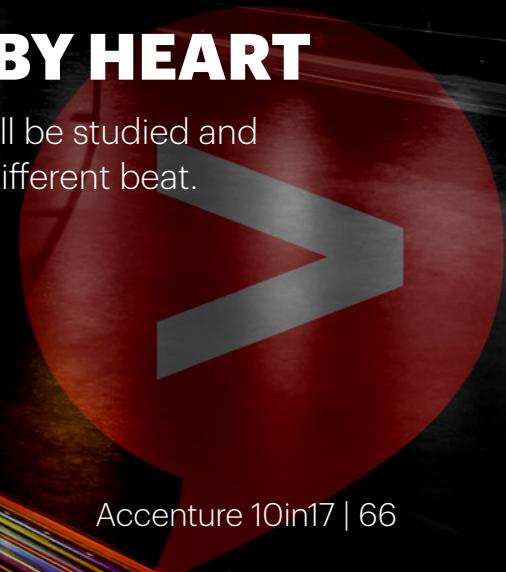
SCORE A GOAL

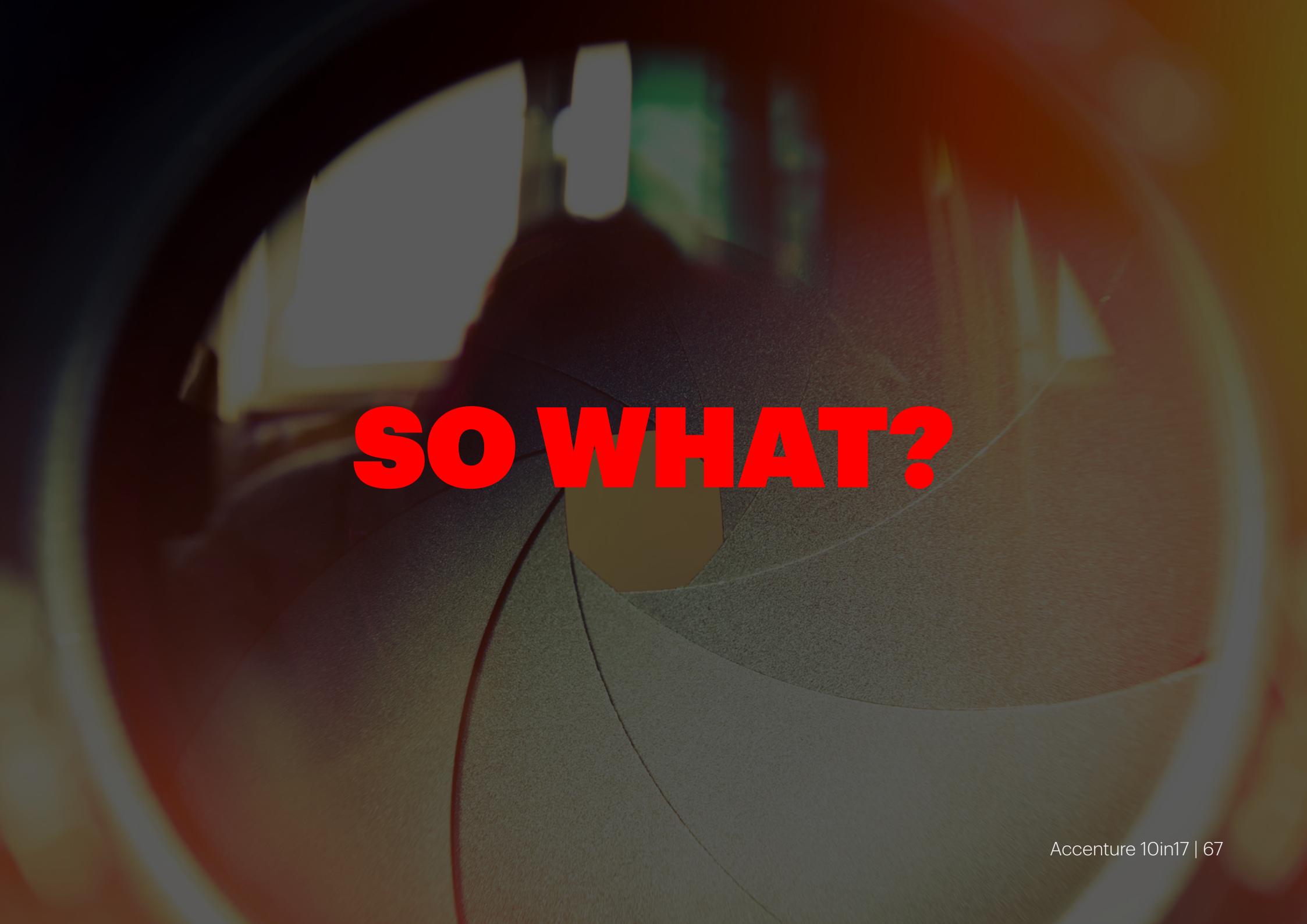
Next-gen metrics and unique indices will be the objective measure of performance.



LEARNING BY HEART

Education structures will be studied and start to be taught to a different beat.





SO WHAT?

REALIGN AND RETRAIN THE ORGANIZATION

TO PREPARE FOR A NEW ERA WITH NEW EXPECTATIONS

EMBRACE AND PROPAGATE THE MOVEMENT

TO BE FUNKY, FRESH AND FOCUSED ON THE NEW

GET BACK TO THE BASICS, USING DIGITAL

AS A MECHANISM FOR BETTERMENT AND MINDFULNESS

TEAM LEADS



Pranitha Patil
EpicDemic



Andrew Ericson
Why so Serious



Bracken Flynn
Break the Bank



Brittni Palkert
All the Feels



Teddy Hanson
Hello, World



Tanya Nguyen
Hungry for Change



Lucy Yin
Life in the Fast Lane



Peter Gregory
Better with Age



Omair Ahmed
Au Nurturel



Sonia Garcia
Namaste Fly

REFERENCES

EPIDEMIC

- ¹ Lonely Planet; "International travel set to increase by 35% over the next decade;" posted June 21, 2016 at <http://www.lonelyplanet.com/news/2016/06/21/international-travel-increase-next-decade/>
- ² The Wall Street Journal; "The Changing Nature of Globalization in Our Hyperconnected, Knowledge-Intensive Economy;" posted June 20, 2014 at <http://blogs.wsj.com/cio/2014/06/20/the-changing-nature-of-globalization-in-our-hyperconnected-knowledge-intensive-economy/>
- ³ International Monetary Fund; "A World of Change;" Finance & Development, September 2014, Vol. 51, No. 3; available online at <http://www.imf.org/external/pubs/ft/fandd/2014/09/kose.htm>
- ⁴ United Nations Development Programme; "Migration, refugees and displacement;" online at <http://www.undp.org/content/undp/en/home/ourwork/sustainable-development/development-planning-and-inclusive-sustainable-growth/migration-refugees-and-displacement.html>
- ⁵ <http://syrianrefugees.eu/>
- ⁶ United Nations High Commissioner for Refugees (UNHCR); GLOBAL TRENDS, Force Displacement in 2015; online at <https://s3.amazonaws.com/unhcrsharedmedia/2016/2016-06-20-global-trends/2016-06-14-Global-Trends-2015.pdf>
- ⁷ Internal Displacement Monitoring Centre; "Global Estimates 2015: People Displaced by Disasters"
- ⁸ Centers for Disease Control and Prevention; "Understanding the Epidemic;" online at <https://www.cdc.gov/drugoverdose/epidemic/>
- ⁹ Centers for Disease Control and Prevention; "2014 Ebola Outbreak in West Africa - Case Counts, online at <https://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/case-counts.html>
- ¹⁰ AlJazeera; "UN: 2016 Mediterranean refugee deaths hit record 3,800;" posted October 26, 2016 at <http://www.aljazeera.com/news/2016/10/2016-mediterranean-refugee-deaths-hit-record-3800-161026162734784.html>
- ¹¹ Refugee Health Technical Assistance Center; online at <http://refugeehealthta.org/physical-mental-health/mental-health/>
- ¹² World Economic Forum; "Global Disease Outbreaks;" online at <http://reports.weforum.org/global-risks-2016/global-disease-outbreaks/>
- ¹³ IBID
- ¹⁴ National Public Radio News; "Surgeon General Murthy Wants America To Face Up To Addiction;" online at <http://www.npr.org/sections/health-shots/2016/11/17/502402409/surgeon-general-murthy-wants-america-to-face-up-to-addiction>
- ¹⁵ Centers for Disease Control and Prevention; "Excessive alcohol use continues to be drain on American economy;" posted October 15, 2015 at <https://www.cdc.gov/media/releases/2015/p1015-excessive-alcohol.html>
- ¹⁶ American Red Cross press release; "Red Cross & The Weather Channel Partner for Weather Red Report;" posted March 15, 2016 at <http://www.redcross.org/news/press-release/Red-Cross-The-Weather-Channel-Partner-for-Weather-Red-Report>

¹⁷ DTCC Connection; "Harnessing the Public-Private Partnership Model to Solve Global Identity Crisis;" posted June 16, 2016 at <http://www.dtcc.com/news/2016/june/16/harnessing-the-public-private-partnership-model-to-solve-global-identity-crisis>

¹⁸ The World Bank; "Pandemic Risk and One Health;" posted September 13, 2013 at <http://www.worldbank.org/en/topic/health/brief/pandemic-risk-one-health>

¹⁹ PBS News Hour; "Ebola outbreak is latest example of globalization's risks;" November 13, 2014 at <http://www.pbs.org/newshour/making-sense/ebola-outbreak-latest-example-globalizations-risks/>

WHY SO SERIOUS

¹ CB Insights; "Brain Boost: AI Deals And Dollars Have Already Reached Record Annual Highs;" posted December 20, 2016 at <https://www.cbinsights.com/blog/artificial-intelligence-startup-funding/>

² VentureBeat; "IBM scores a record 8,000 patents in 2016;" posted January 8, 2017 at <http://venturebeat.com/2017/01/08/ibm-hits-record-breaking-8000-patents-granted-in-2016/>

³ Frost & Sullivan; "From \$600 M to \$6 Billion, Artificial Intelligence Systems Poised for Dramatic Market Expansion in Healthcare;" posted January 5, 2016 at <http://ww2.frost.com/news/press-releases/600-m-6-billion-artificial-intelligence-systems-poised-dramatic-market-expansion-healthcare/>

⁴ Forbes; "Amazon Says Echo Was The Best-Selling Product This Holiday - Sells Millions;" posted December 27, 2016 at <http://www.forbes.com/sites/debraborchardt/2016/12/27/amazon-says-echo-was-the-best-selling-product-this-holiday-sells-millions/#4c21b8ee63ce>

⁵ CNBC; "Domgy, a robot dog that dances and protects, but won't eat your homework;" posted June 25, 2016 at <http://www.cnbc.com/2016/06/24/domgy-a-robot-dog-that-dances-and-protects-but-wont-eat-your-homework.html>

⁶ TNW; "Boston Dynamics' 'SpotMini' is a robot dog that's way better than the real thing;" online at <http://thenextweb.com/insider/2016/06/23/boston-dynamics-created-spotmini-a-robot-dog-thats-way-cooler-than-yours/#gref>

⁷ Oxford Martin School; "The Future of Employment: How susceptible are jobs to computerisation?;" published September 2013 and available online at <http://www.oxfordmartin.ox.ac.uk/publications/view/1314>

⁸ World Economic Forum; "Worried about AI taking your job? It's already happening in Japan;" posted January 6, 2017 at <https://www.weforum.org/agenda/2017/01/worried-about-ai-taking-your-job-its-already-happening-in-japan>

⁹ The Business Insider; "This is the biggest factor keeping planes from fully flying themselves;" posted March 26, 2015 at <http://www.businessinsider.com>this-is-the-biggest-factor-keeping-planes-from-flying-fully-automated-2015-3>

¹⁰ Becker's Hospital Review; "10 Statistics on Hospital Labor Costs as a Percentage of Operating Revenue;" posted December 10, 2013 at <http://www.beckershospitalreview.com/finance/10-statistics-on-hospital-labor-costs-as-a-percentage-of-operating-revenue.html>

¹¹ BMJ; "Medical error—the third leading cause of death in the US;" published May 3, 2016 at <http://www.bmj.com/content/353/bmj.i2139>

¹² Newsweek; "How Artificial Intelligence and Robots Will Radically Transform the Economy;" posted November 30, 2016 at <http://www.newsweek.com/2016/12/09/robot-economy-artificial-intelligence-jobs-happy-ending-526467.html?rx=x-us>

¹³ Forbes; "Davos Highlights AI's Massive PR Problem;" posted January 22, 2017 at <http://www.forbes.com/sites/jasonbloomberg/2017/01/22/davos-highlights-ais-massive-pr-problem/#e1308f561cb>

¹⁴ Executive Office of the President National Science and Technology Council Committee on Technology; "Preparing for the Future of Artificial Intelligence;" published October 2016; available online at https://www.whitehouse.gov/sites/default/files/whitehouse_files/microsites/ostp/NSTC/preparing_for_the_future_of_ai.pdf

BREAK THE BANK

¹ TechCrunch; "Facebook Introduces Free Friend-To-Friend Payments Through Messages;" posted March 17, 2015 at <https://techcrunch.com/2015/03/17/facebook-pay/>

² MarketWatch; "4 blockchain companies that could change everything from accounting to money transfers;" posted May 11, 2016 at <http://www.marketwatch.com/story/4-blockchain-companies-that-could-change-everything-from-accounting-to-money-transfers-2016-05-11>

³ KPMG and CBInsights; "The Pulse of Fintech, Q3 2016;" online at <https://assets.kpmg.com/content/dam/kpmg/xx/pdf/2016/11/the-pulse-of-fintech-q3-report.pdf>

⁴ The Verge; "Amazon just launched a cashier-free convenience store;" posted online December 5, 2016 at <http://www.theverge.com/2016/12/5/13842592/amazon-go-new-cashier-less-convenience-store>

⁵ <http://www.trustev.com/>

⁶ Bloomberg; "Why America's \$2.9 Trillion Medical Industry Still Runs on Paper Payments;" posted June 10, 2015 at <https://www.bloomberg.com/news/articles/2015-06-10/why-america-s-2-9-trillion-medical-industry-still-runs-on-paper-payments>

⁷ FierceHealthcare; "How one hospital system transformed patient collections, improved satisfaction;" posted May 12, 2015 at <http://www.fiercehealthcare.com/finance/how-one-hospital-system-transformed-patient-collections-improved-satisfaction>

REFERENCES

ALL THE FEELS

- ¹ BuzzFeed News; "This Analysis Shows How Viral Fake Election News Stories Outperformed Real News On Facebook;" posted November 16, 2016 at https://www.buzzfeed.com/craigisilverman/viral-fake-election-news-outperformed-real-news-on-facebook?utm_term=.sxmeWRIkw#.miNMJKVog
- ² WBIR; "Study: 15% to 30% of online reviews are fake;" posted September 9, 2014 at <http://www.wbir.com/money/study-15-to-30-of-online-reviews-are-fake/9510167>
- ³ CNET; "Facebook: 8.7 percent are fake users;" posted August 1, 2012 at <https://www.cnet.com/news/facebook-8-7-percent-are-fake-users/>
- ⁴ World Health Organization; "Busting the myths about Ebola is crucial to stop the transmission of the disease in Guinea;" posted April 2014 at <http://www.who.int/features/2014/ebola-myths/en/>
- ⁵ NBC News; "1 in 4 parents thinks shots cause autism;" posted March 1, 2010 at http://www.nbcnews.com/id/35638229/ns/health-childrens_health/t/parents-thinks-shots-cause-autism/#.WHPkkvkrKM8
- ⁶ UK National Health Service; "Supplements, Who Needs Them?" published June 2011 at https://www.nhs.uk/news/2011/05May/Documents/BtH_supplements.pdf
- ⁷ Mintel; "Vitamin and supplements market in good health: 46% of all Brits are daily users;" posted September 21, 2016 at <http://www.mintel.com/press-centre/social-and-lifestyle/vitamin-and-supplements-market-in-good-health-46-of-all-brits-are-daily-users>
- ⁸ Gallup; "Americans' Trust in Mass Media Sinks to New Low;" posted September 14, 2016 at <http://www.gallup.com/poll/195542/americans-trust-mass-media-sinks-new-low.aspx>
- ⁹ The New York Times; "As Fake News Spreads Lies, More Readers Shrug at the Truth;" posted December 6, 2016 at <https://www.nytimes.com/2016/12/06/us/fake-news-partisan-republican-democrat.html?r=0>
- ¹⁰ The Guardian; "How technology disrupted the truth;" posted July 12, 2016 at <https://www.theguardian.com/media/2016/jul/12/how-technology-disrupted-the-truth>
- ¹¹ Government Technology; "Misinformation on Social Media: Can Technology Save Us?;" posted November 30, 2016 at http://www.govtech.com/social/Misinformation-on-Social-Media-Can-Technology-Save-Us.html?utm_term=Misinformation%20on%20Social%20Media%253A%20Can%20Technology%20Save%20Us&utm_campaign=Cloud%20Procurement%20Guide%202.0%20Tackles%20Security%252C%20Encryption%20%257C%20Illinois%20Doubles%20Down%20on%20Blockchain%20Promises&utm_content=email&utm_source=Act-On+Software&utm_medium=email
- ¹² IBID
- ¹³ Politico; "White House decries 'corrosive' effect of fake news stories;" posted December 5, 2016 at <http://www.politico.com/story/2016/12/fake-news-josh-earnest-white-house-232205>

¹⁴ The New York Times; "As Fake News Spreads Lies, More Readers Shrug at the Truth;" posted December 6, 2016 at <https://www.nytimes.com/2016/12/06/us/fake-news-partisan-republican-democrat.html?r=1>

¹⁵ The New York Times; "Google and Facebook Take Aim at Fake News Sites;" posted November 14, 2016 at <https://www.nytimes.com/2016/11/15/technology/google-will-ban-websites-that-host-fake-news-from-using-its-ad-service.html>

¹⁶ The Guardian; "How to solve Facebook's fake news problem: experts pitch their ideas;" posted November 29, 2016 at <https://www.theguardian.com/technology/2016/nov/29/facebook-fake-news-problem-experts-pitch-ideas-algorithms>

¹⁷ IBID

¹⁸ The Wall Street Journal; "Facebook to Push for Better Journalism;" posted January 11, 2017 at <http://www.wsj.com/articles/facebook-to-push-for-better-journalism-1484146801>

HELLO WORLD

¹ Johan Schalkwyk, Voice Technology and Research Lead, Google, "KPCB Internet Trends 2016 Code Conference" online at <http://www.kpcb.com/internet-trends>; page 118

² Thrive Analytics; "Local Search Reports" 2013-2015; online at <http://www.kpcb.com/internet-trends>; page 121

³ Tractica; "The Future of Betterment," April 2016 online at <http://trendwatching.com/trends/the-future-of-betterment/>

⁴ Facebook, Snapchat; "KPCB Internet Trends 2016 Code Conference" online at <http://www.kpcb.com/internet-trends>; page 78, 80

⁵ <https://www.youtube.com/watch?v=IDYv8flhgOQ>

⁶ CES; Mark Fields (CEO, Ford); Global Innovation presentation

HUNGRY FOR CHANGE

¹ NPR; "New Dietary Guidelines Crack Down On Sugar. But Red Meat Gets A Pass;" posted January 7, 2016 at <http://www.npr.org/sections/thesalt/2016/01/07/462160303/new-dietary-guidelines-crack-down-on-sugar-but-red-meat-gets-a-pass>

² Health Affairs; "A Penny-Per-Ounce Tax On Sugar-Sweetened Beverages Would Cut Health And Cost Burdens Of Diabetes;" January 2012; online at <http://content.healthaffairs.org/content/31/1/199>

³ Los Angeles Times; "Mexico's soda tax will save 18,900 lives and more than \$983 million over 10 years, study says;" posted November 2, 2016 at <http://www.latimes.com/science/sciencenow/la-sci-sn-soda-tax-mexico-20161102-story.html>

⁴ The New York Times; "More Evidence That Soda Taxes Cut Soda Drinking;" posted August 25, 2016 at <https://www.nytimes.com/2016/08/25/upshot/more-evidence-that-soda-taxes-cut-soda-drinking.html?r=0>

⁵ Fortune; "Special Report: The war on big food;" posted May 21, 2015 at <http://fortune.com/2015/05/21/the-war-on-big-food/>

⁶ USDA news release; "New Data Reflects the Continued Demand for Farmers Markets;" posted August 4, 2014 at <https://www.usda.gov/wps/portal/usda/usdahome?contentid=2014/08/0167.xml>

⁷ Chicago Tribune; "How millennials are driving movement for clean labels on our food;" posted February 16, 2016 at <http://www.chicagotribune.com/business/sc-clean-labels-food-0219-20160218-story.html>

⁸ Fortune; "Campbell Soup Joins the Venture Capital Craze;" posted February 18, 2016 at <http://fortune.com/2016/02/17/campbell-soup-vc-fund>

⁹ Google Food Trends Report 2016; online at <https://think.storage.googleapis.com/docs/FoodTrends-2016.pdf>

¹⁰ IBID

¹¹ think with Google; "Food Trends 2016;" online at <https://think.storage.googleapis.com/docs/FoodTrends-2016.pdf>

¹² IBID

¹³ The Economist; "Nestlé looks for ways to boost stale growth as consumers snub unhealthy food;" posted January 7, 2017 at <http://www.economist.com/news/business/21713832-its-fightback-includes-chocolate-lower-calorie-hollow-sugar-crystals-and-healthier-frozen?src=scn/li/te/b/ed/nestlooksforwaysbooststalegrowthasconsumerssnubunhealthyfood>

¹⁴ Digital Trends; "How many calories are in that sundae? Google will tell you with the snap of a picture;" posted June 3, 2015 at <http://www.digitaltrends.com/photography/google-calorie-counter-news/>

¹⁵ Mobi Health News; "Lose It! now lets users log foods with their phone's camera and a machine learning algorithm;" posted September 29, 2016 at <http://www.mobihlthnews.com/content/lose-it-now-lets-users-log-foods-their-phones-camera-and-machine-learning-algorithm>

¹⁶ CB Insights; "Food Fight: Grocery Delivery vs. Meal Delivery Funding Trends;" posted May 23, 2016 at <https://www.cbinsights.com/blog/grocery-vs-meal-delivery-startup-financing/>

¹⁷ Meals on Wheels; "More Than a Meal Pilot Study," online at <http://www.mealsonwheelsamerica.org/theissue/research/more-than-a-meal>

¹⁸ Gerontological Society of America; "More Than A Meal? A Randomized Control Trial Comparing the Effects of Home-Delivered Meals Programs on Participants' Feelings of Loneliness." Published by Oxford University Press on November 26, 2015; available online at <https://www.ncbi.nlm.nih.gov/pubmed/26613620>

REFERENCES

LIFE IN THE FAST LANE

- ¹ Smartrail World; "Deutsche Bahn and Hyperloop TT to build 'Innovation Train' by 2018;" posted August 1, 2016 at <https://www.smartrailworld.com/deutsche-bahn-and-hyperloop-tt-to-build-innovation-train-by-2018>
- ² TechCrunch; "Amazon starts Prime Air drone delivery trial in the UK — but only with two beta users;" posted December 14, 2016 at <https://techcrunch.com/2016/12/14/amazons-prime-air-delivery-uk/>
- ³ Forbes; "Hyperloop Is Real: Meet The Startups Selling Supersonic Travel;" posted February 11, 2015 at <http://www.forbes.com/sites/bruceupbin/2015/02/11/hyperloop-is-real-meet-the-startups-selling-supersonic-travel/#5dfec158313c>
- ⁴ Fortune; "Here's How Uber Is Plotting Its Entry Into Long-Haul Trucking;" posted September 28, 2016 at <http://fortune.com/2016/09/28/uber-otto-long-haul-trucking/>
- ⁵ Independent; "Amazon unveils cargo plane, first of a fleet of 40;" posted August 5, 2016 at <http://www.independent.co.uk/news/business/news/amazon-delivery-cargo-plane-fleet-prime-air-jeff-bezos-a7173406.html>
- ⁶ The Washington Post; "Mercedes-Benz adds lane changes to its autonomous driving offerings," posted December 9, 2015 at https://www.washingtonpost.com/news/innovations/wp/2015/12/09/mercedes-benz-adds-lane-changes-to-its-autonomous-driving-offerings/?utm_term=.ec5888b5cac7
- ⁷ The Wall Street Journal; "A Car That Takes Your Pulse;" posted November 28, 2012 at <http://www.wsj.com/articles/SB10001424127887324352004578131083891595840>
- ⁸ Accenture; "Healthcare For Here, Or to Go;" online at https://www.accenture.com/!20160904T220831_w/_us-en_acnmedia/Accenture/Conversion-Assets/DotCom/Documents/Global/PDF/Dualpub_25/Accenture-Healthcare-for-Here-or-to-Go-v2.pdf#zoom=50
- ⁹ Slate; "Tesla's Real Innovation Isn't the Electric Car;" posted April 11, 2016 at http://www.slate.com/articles/business/the_juice/2016/04/tesla_s_real_innovation_is_its_business_practices_not_its_electric_cars.html
- ¹⁰ Moros; Tobias; "The Value of Partnerships in the Container Shipping Industry;" online at [https://newsroom.uber.com/uberhealth/](http://www.academia.edu/12699588/The_Value_of_Partnerships_in_The(Container_Shipping_Industry)
- ¹¹ Healthcare Finance; "Medicare targets ambulance services in fraud fight;" posted December 1, 2014 at <http://www.healthcarefinancenews.com/news/medicare-targets-ambulance-services-fraud-fight>
- ¹² The Wall Street Journal; "Drone Delivers Medicine to Rural Virginia Clinic;" posted July 17, 2015 at <http://www.wsj.com/articles/drone-delivers-medicine-to-rural-virginia-clinic-1437155114>

¹⁴ DC Velocity; "UPS and FedEx expand pharmaceutical shipping channels to global market;" posted July 14, 2016 at <http://www.dcvelocity.com/articles/20160714-ups-and-fedex-expand-pharmaceutical-shipping-channels-to-global-market/>

BETTER WITH AGE

- ¹ National Institute on Aging; "World's older population grows dramatically;" posted March 28, 2016 at <https://www.nia.nih.gov/newsroom/2016/03/worlds-older-population-grows-dramatically>
- ² The Washington Post; "It's official: Japan's population is dramatically shrinking;" posted February 26, 2016 at https://www.washingtonpost.com/news/worldviews/wp/2016/02/26/its-official-japans-population-is-dramatically-shrinking/?utm_term=.3216a8abf8a2
- ³ USA Today; "Americans aren't having as many kids: 8 states post population loss;" posted December 21, 2016 at <http://www.usatoday.com/story/news/nation/2016/12/21/utah-fastest-growing-state-west-bucks-sluggish-trend/95694042/>
- ⁴ IBID
- ⁵ The New York Times; "The Mystery of Spain's Perpetual Jobs Problem;" posted May 2, 2016 at <https://www.nytimes.com/2016/05/03/upshot/spains-jobless-numbers-almost-look-like-misprints.html?r=0>
- ⁶ National Institute on Aging and the United States Census Bureau; "An Aging World: 2015" issued March 2016 and found online at <http://www.census.gov/content/dam/Census/library/publications/2016/demo/p95-16-1.pdf>
- ⁷ MobiHealthNews; "In-Depth: Digital health innovation in fertility and women's health – not so niche anymore;" posted December 22, 2016 at <http://www.mobihalthnews.com/content/depth-digital-health-innovation-fertility-and-womens-health-%E2%80%99not-so-niche-anymore>
- ⁸ Forbes; "The New Year Of Optimism For Femtech;" posted December 31, 2016 at <http://www.forbes.com/sites/jillrichmond/2016/12/31/the-new-year-of-optimism-for-femtech/#7e69e67e44cb>
- ## AU NURTUREL
- ¹ National Human Genome Research Institute; "An Overview of the Human Genome Project;" online at <https://www.genome.gov/12011238/an-overview-of-the-human-genome-project/>

² Coverage of Disruptive Science and Technology; "China's \$9.2 billion precision medicine initiative could see about 100 million whole human genomes sequenced by 2030 and more if sequencing costs drop;" posted June 7, 2016 at <http://www.nextbigfuture.com/2016/06/chinas-92-billion-precision-medicine.html>
- ³ The White House Office of the Press Secretary news release; "FACT SHEET: President Obama's Precision Medicine Initiative;" released January 30, posted online at <https://www.whitehouse.gov/the-press-office/2015/01/30/fact-sheet-president-obama-s-precision-medicine-initiative>
- ⁴ National Human Genome Research Institute; "The Cost of Sequencing a Human Genome;" online at <https://www.genome.gov/sequencingcosts/>
- ⁵ Forbes; "Surprise! With \$60 Million Genentech Deal, 23andMe Has A Business Plan;" posted January 6, 2015 at <http://www.forbes.com/sites/matthewherper/2015/01/06/surprise-with-60-million-genentech-deal-23andme-has-a-business-plan/#527ba03b7927>
- ⁶ CB Insights; <https://www.cbinsights.com/c-832a39cd83372ff5da40b08d389a4a8e?term=ced6faf6-e912-522c-9aa8-36ee5d887bab>
- ⁷ The New York Times; "When Pills Fail, This, er, Option Provides a Cure;" posted January 16, 2013 at <http://www.nytimes.com/2013/05/19/magazine/say-hello-to-the-100-trillion-bacteria-that-make-up-your-microbiome.html>
- ⁸ CB Insights; "Small World: 20+ Startups Attacking The Human Microbiome;" posted December 8, 2016 at <https://www.cbinsights.com/blog/microbiome-startups-market-map-company-list/>
- ⁹ Grand View Research; "Probiotics Market Analysis By Application;" posted September 2016 online at <http://www.grandviewresearch.com/industry-analysis/probiotics-market>
- ¹⁰ Markets and Markets; "Kombucha Market worth USD 1.8 Billion USD by 2020;" posted online at <http://www.marketsandmarkets.com/PressReleases/kombucha.asp>
- ¹¹ National Institutes of Health; "Probiotics: In Depth" online at <https://ncgil.nih.gov/health/probiotics/introduction.htm>
- ¹² The National Academy of Sciences and the National Academy of Medicine press release; "National Academy of Sciences and National Academy of Medicine Announce Initiative on Human Gene Editing;" posted May 18, 2015 at <http://www8.nationalacademies.org/onpinews/newsitem.aspx?RecordID=05182015>
- ¹³ National Human Genome Institute; "ESI Research Program;" online at <https://www.genome.gov/10001618/>
- ¹⁴ National Institutes of Health; "Statement on NIH funding of research using gene-editing technologies in human embryos;" posted April 28, 2015 at <https://www.nih.gov/about-nih/who-we-are/nih-director/statements/statement-nih-funding-research-using-gene-editing-technologies-human-embryos>
- ¹⁵ U.S. News and World Report; "Proceed With Caution;" posted February 8, 2016 at <http://www.usnews.com/opinion/blogs/policy-dose/articles/2016-02-08/nih-wont-fund-human-embryo-gene-editing-but-others-will>
- Accenture 10in17 | 73

REFERENCES

NAMASTEFLY

- ¹ The Wall Street Journal; “Millennial Employees Confound Big Banks;” posted April 8, 2016 at <https://www.wsj.com/articles/millennial-employees-confound-big-banks-1460126369>
- ² NBC News; “2017 New Year’s Resolutions: The Most Popular and How To Stick to Them;” posted January 1, 2017 at <http://www.nbcnews.com/business/consumer/2017-new-year-s-resolutions-most-popular-how-stick-them-n701891>
- ³ Forbes; “How Yoga Is Spreading In The U.S.;” posted March 15, 2016 at <http://www.forbes.com/sites/alicegwalton/2016/03/15/how-yoga-is-spreading-in-the-u-s/#519c53d64a74>
- ⁴ IBID
- ⁵ Forbes; “10 World Renowned Meditation Tech Experts Share What’s Next In 2017;” posted November 25, 2016 at <http://www.forbes.com/sites/tomaslaurinavicius/2016/11/25/meditation-2017/#6a4619a12322>
- ⁶ Fortune; “Meditation Has Become A Billion-Dollar Business;” posted March 12, 2016 at <http://fortune.com/2016/03/12/meditation-mindfulness-apps/>
- ⁷ IBID
- ⁸ IBID
- ⁹ World Health Organization; “No physical health without mental health: lessons unlearned?” online at <http://www.who.int/bulletin/volumes/91/12/115063.pdf>
- ¹⁰ Forbes; “10 World Renowned Meditation Tech Experts Share What’s Next In 2017;” posted November 25, 2016 at <http://www.forbes.com/sites/tomaslaurinavicius/2016/11/25/meditation-2017/#2b4ctb0a2322>
- ¹¹ The Guardian; “Mindfulness in the mainstream: an old solution to modern problems;” posted October 19, 2015 at <https://www.theguardian.com/lifeandstyle/2015/oct/20/mindfulness-in-the-mainstream-an-old-solution-to-modern-problems>
- ¹² IBID
- ¹³ National Institutes of Health; “Americans Spend \$30 Billion a Year Out-of-Pocket on Complementary Health Approaches;” published June 22, 2016 at online at <https://nccih.nih.gov/research/results/spotlight/americans-spend-billions>
- ¹⁴ IBIS World; “Alternative Healthcare Providers in the US: Market Research Report;” posted December 2015, online at <http://www.ibisworld.com/industry/default.aspx?indid=1565>
- ¹⁵ Live Science; “Crystal Healing: Stone-Cold Facts About Gemstone Treatments;” posted January 20, 2015 at <http://www.livescience.com/40347-crystal-healing.html>
- ¹⁶ CRYO; “Cryotherapy Medical Studies;” online at <http://cryo.com/cryotherapy-medical-studies>

¹⁷ Pew Research Center; “6 facts about marijuana;” posted April 14, 2015 at <http://www.pewresearch.org/fact-tank/2015/04/14/6-facts-about-marijuana>

¹⁸ Forbes; “Many States Have Legalized Medical Marijuana, So Why Does DEA Still Say It Has No Therapeutic Use?;” posted November 16, 2016 at <http://www.forbes.com/sites/rigarubin/2016/11/16/many-states-have-legalized-medical-marijuana-so-why-does-dea-still-say-it-has-no-therapeutic-use/#13136fb35a1e>

ABOUT ACCENTURE

Accenture is a leading global professional services company, providing a broad range of services and solutions in strategy, consulting, digital, technology and operations. Combining unmatched experience and specialized skills across more than 40 industries and all business functions—underpinned by the world's largest delivery network—Accenture works at the intersection of business and technology to help clients improve their performance and create sustainable value for their stakeholders. With approximately 373,000 people serving clients in more than 120 countries, Accenture drives innovation to improve the way the world works and lives. Visit us at www.accenture.com.

ABOUT ACCENTURE STRATEGY

Accenture Strategy operates at the intersection of business and technology. We bring together our capabilities in business, technology, operations, and functional strategy to help our clients envision and execute industry-specific strategies that support enterprise wide transformation. Our focus on issues related to digital disruption, competitiveness, global operating models, talent, and leadership help drive both efficiencies and growth. Visit us at www.accenture.com/strategy.

CONTACT THE AUTHORS

Matthew Collier

matthew.collier@accenture.com

Drew Boston

drew.boston@accenture.com

Michael Kovach

michael.kovach@accenture.com

Katie Dunn

katherine.dunn@accenture.com

Sonia Garcia

sonia.a.garcia@accenture.com

Copyright © 2017 Accenture

All rights reserved.

Accenture, its logo, and High Performance Delivered are trademarks of Accenture.

10in17@accenture.com