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KNOW WHAT'S NEXT

Strategies for Transforming Your Business & Future

by Daniel Burrus
CEO of Burrus Research

- Top 20 Technology-Driven Hard Trends Shaping the Future
- Amazon's Secret Weapon: Being Anticipatory
- Is Digital Disruption Keeping You Awake at Night?
- Beating Cybercrime *Before* It Happens to You
- Pre-solving Predictable Problems Is Better Than Experiencing Them
- Attracting and Retaining the Best Employees
- Why Your Corporate Culture Matters
- Can You Afford Your Legacy System?
- Blockchain Is a Disruption and an Opportunity
- IoT: At Home and on the Job
- Artificial Intelligence *Will* Impact Your Industry

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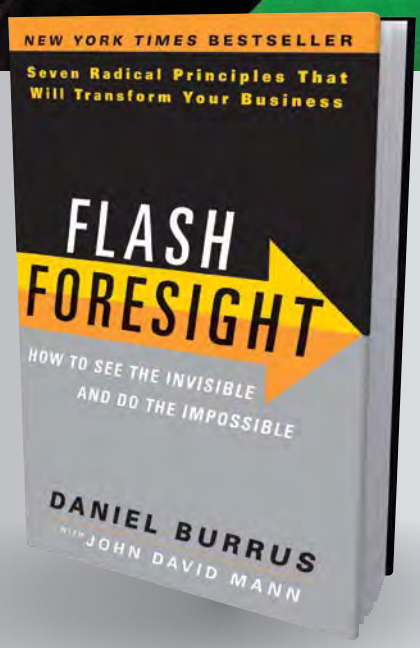

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Top 20 Technology-Driven HARD TRENDS

SHAPING THE FUTURE

There has never been a shortage of trends, and it's predictable that as we near the end of every year, a new batch of trends will be published. The real problem for you is figuring out which ones will happen. I have been publishing a list of top trends since 1983, and if you have been a subscriber to my newsletter for decades, you know they have been highly accurate. The reason for this is the methodology that I developed back then, which separates what I call Hard Trends, the trends that will happen, from Soft Trends, the trends that might happen. Knowing their distinctions can make all the difference; and this year's Top 20 List is no exception.

I have been writing about each one for many years, but to make it on my annual list, they have to be developed enough for you to apply them to exponentially grow your business. Each is growing at an increasingly exponential rate. As such, they will all impact our lives, both personally and professionally, in the coming year and beyond.

These trends highlight enormous, game-changing opportunities in a broad array of applications and industries. I hope the New Year affords you the opportunity to leverage the remarkable promises they all offer.

1 ARTIFICIAL INTELLIGENCE (AI), ADVANCED MACHINE LEARNING, AND COGNITIVE COMPUTING APPLICATIONS

Cognitive Computing Applications Grow Rapidly

Advances in **Machine Learning** and **AI**, such as IBM's Watson, coupled with networked intelligent sensors, will create a giant leap forward thanks to exponential advances in computing power, digital storage, and bandwidth. AI will increasingly become embedded in our applications and processes. Also, thanks to better sensors, increasing Machine Intelligence, and Siri-like voice communications, robots will work with humans in new and productive ways. Advanced Automation and Robotics will likewise benefit.

2 ADAPTIVE AND PREDICTIVE CYBERSECURITY SYSTEMS

Business, government, and education have moved cybersecurity from an underfunded back-office activity to a major initiative going forward. With the rapid growth of connected technologies such as the Internet of Things and semi-autonomous (as well as fully autonomous) cars, security systems will move beyond reacting faster to include adaptive security systems using AI and other advanced tools, such as Behavioral Analytics. This will add a level of Predict and Prevent, allowing us to stop many, but sadly not all, attacks before they start.

3 BIG DATA AND THE USE OF HIGH-SPEED DATA ANALYTICS

Big Data is a term that describes the technologies and techniques used to capture and utilize exponentially increasing streams of data. The goal is to bring enterprise-wide visibility and insights that enable rapid, critical decisions. Using advanced cloud services, High-Speed Data Analytics will increasingly be employed as a complement to existing information management systems and programs to identify actionable insights from a mass of Big Data. Separating good data from bad data will also become a rapidly growing service.

4 ADVANCED CLOUD COMPUTING SERVICES

Businesses of all sizes will increasingly embrace new variations on public, private, hybrid, and personal mobile clouds. This represents a major shift in how organizations obtain and maintain software, hardware, and computing capacity to cut costs in IT, human resources, and sales management. Not all clouds are created equal. Some are optimized for IoT applications, while others are designed for different levels of security and speed.

5 VIRTUALIZATION OF STORAGE, DESKTOPS, APPLICATIONS, AND NETWORKING

The virtualization of hardware and software will see continued acceptance through growth in both large and small businesses as virtualization security improves. Hardware-as-a-Service (HaaS) is increasingly joining Software-as-a-Service (SaaS), creating what some have called "IT as a Service." In addition to the rapid growth of virtual storage, virtualization of processing power will continue to grow, allowing mobile devices to access supercomputer capabilities and apply them to processes such as purchasing and logistics. These services will help companies cut costs as they provide access to

powerful software programs and the latest technology without the expense of a large IT staff and time-consuming, expensive upgrades.

6 VIRTUALIZATION OF PROCESSES AND SERVICES (ON-DEMAND SERVICES)

The virtualization of processes and services will increasingly be accessed by companies needing to update and streamline existing services, and to rapidly deploy new services. The rapid growth of Collaboration-as-a-Service, Security-as-a-Service, Networking-as-a-Service, and many more are all giving birth to Everything-as-a-Service.

7 BLOCKCHAINS

Introduced as a means of transferring Bitcoins, blockchains are fast gaining traction in any number of areas. A system that enables secure digital direct transfers, blockchains decentralize transactions by eliminating the middle man, thereby allowing for direct connection among all involved parties. In addition to currency, blockchains can be used to transfer contracts, insurance policies, real estate titles, bonds, votes, and other items of value. Given their security and lower cost, blockchains create a platform that will impact limitless products and services, thereby enabling innovation and growth.

8 AUGMENTED REALITY (AR) AND VIRTUAL REALITY (VR) APPS AND DEVICES

Augmented Reality will quickly become more common by adding just-in-time information to our physical world. Simply aim your smartphone camera at a crowded street to find the stores that have the exact products you're looking for. Conventional-looking glasses will allow wearers to overlay data on their fields of vision, providing useful information about what they're looking at. By contrast, virtual reality—using oversized headsets to provide an immersive, computer-generated 3-D environment with which the wearer can interact—will grow more slowly due to the need for related software design and other forms of time-intensive development. Instead, growth in VR will focus on more specific industries. For instance, architects and designers can use VR to show potential clients specific features of buildings prior to actual construction.

9 SMART VIRTUAL E-ASSISTANTS AND MICROPHONE ENABLED DEVICES

The use of smart e-Assistants is accelerating, offering what is rapidly becoming a mobile electronic concierge available on any smart device, including phones, tablets, televisions, and cars. Stand-alone audio assistants such as Amazon Echo and Google Home will expand rapidly into business and government applications. Soon retailers will have a Siri-like sales assistant, and soon many of us will be using an e-Personal Health Assistant that taps into the real-time health data from a smart watch to predict potential problems and offer suggestions.

10 THE INTERNET OF THINGS (IOT) BECOMES INCREASINGLY INTELLIGENT

Machine-to-Machine communications using chips, microsensors, and both wired and wireless networks will join networked sensors to create a rapidly growing Internet of Things, sharing real-time data, performing diagnostics, and making virtual repairs—all without human intervention. By 2020, there will be well over 50 billion "things" talking to each other, performing tasks, and making decisions based on predefined guidelines using artificial intelligence.

11 3-D PRINTING (ADDITIVE MANUFACTURING) OF FINISHED GOODS

Personalized manufacturing of finished goods using 3-D Printing will grow exponentially. 3-D printers build things by depositing material, typically plastic or metal, layer by layer, until the product is finished. Originally designed to print prototypes, they are increasingly being used to print final products such as jewelry, iPhone cases, shoes, car dashboards, parts for jet engines, and prosthetics including limbs, human jaw bones, blood vessels, organs, and much more. This allows companies to manufacture one-of-a-kind or small runs of items quickly, locally, and with far fewer costs.

12 SMARTER SMARTPHONES AND TABLETS DRIVE MOBILE PROCESS INNOVATION

The vast majority of mobile phones sold globally have browsers, making the smartphone our primary computer. This signals a profound shift in global computing, allowing businesses of all sizes to transform the ways in which they market, sell, communicate, collaborate, educate, train, and innovate using mobility. An enterprise mobility strategy that puts mobile first is rapidly becoming mandatory for organizations of all sizes.

13 MOBILE APPS FOR BUSINESS PROCESS INNOVATION

As we increasingly transform business processes using mobility, use of mobile apps for purchasing, supply chain, logistics, distribution, service, sales, and maintenance will grow rapidly. There will be an increasing focus on Business App Stores within companies, giving users access to the personalized information they need on their mobile devices anytime and anywhere.

14 MOBILE BANKING AND PAYMENTS

Mobile banking, using smartphones as eWallets, is already being used in an increasing number of countries. Use is finally taking off on a larger scale in the U.S., thanks to an increasing number of phones with secure mobile banking apps, Near Field Communication (NFC) chips, Biometric Identification and the use of Tokens where no credit card or personal information is exchanged.

15 WEARABLES AND APPLICATIONS

Wearables will increasingly be used for both personal and business applications. Apple's smart watch with health

sensors and software joins Google, Samsung, Microsoft, and others as they battle for market share. This will drive further innovation and sales in other wearable technology. One example is a patch that can be attached to the skin for remote disease management, diagnostics, and general health via wireless transfer.

16 SOCIAL BUSINESS APPLICATIONS

"Social" takes on a new level of urgency as organizations shift from an Information Age "informing" model to a Communication Age "communicating and engagement" model. Social software for business will reach a new level of adoption, with applications to enhance relationships, collaboration, networking, social validation, and more. Marketers and researchers will employ Social Search and Social Analytics to measure real-time sentiments of large groups of targeted people.

17 VISUAL COMMUNICATIONS FOR BUSINESS

Visual communication takes videoconferencing to a new level, thanks to free programs like Skype, FaceTime, and others for video communication on phones, tablets, and home televisions. Businesses of all sizes are rapidly embracing such applications as a primary relationship-building and communications tool.

18 ENHANCED LOCATION AWARENESS FOR RETAIL

Location awareness using in-building systems allows customers with smartphones to navigate stores and quickly find what they are looking for. This, combined with Geo-Social Marketing and Augmented Reality, will drive the creation of more business-to-consumer apps. In addition, Geo-Spatial Visualization combines Geographic Information Systems (GIS) with location-aware data, Radio Frequency Identification (RFID), and other location-aware sensors (including the current locations of users from the use of their mobile devices) to create new insights and competitive advantage.

19 DRONES REACH A NEW HEIGHT, ADDING AI

The number of applications for drones will continue to expand rapidly. Drones have already proven to be of high value for search and rescue, and are rapidly being applied to many industries. For example, agriculture uses drones to check crops, fences, and cattle; utility companies use them to look for downed power lines; real estate agents use them for aerial photography. The explosion of hobby drones will drive innovation for both personal and industrial applications. AI will be increasingly integrated, expanding capabilities far beyond today's applications.

20 ENERGY STORAGE AND MICROGRIDS

Energy storage starts to become a reality, as companies such as Tesla begin to sell their smart battery systems to businesses and homes that generate some of their own power using solar, wind, or other systems. In addition, as first-generation hybrid vehicles get too old for the marketplace, there will be millions of batteries that will still hold enough of a charge to be repurposed into inexpensive energy storage systems. This will enable a national network of smaller and more secure smart Micro Grids.

Amazon's Secret Weapon: BEING ANTICIPATORY

In many ways it seems impossible that Amazon has been in business for more than 20 years. Time does fly! During that time, Amazon has been — and continues to be — the largest and most innovative leader in the e-commerce market. You may be surprised to discover the other markets Amazon not only has entered, but is also redefining and reinventing.

Amazon Grows While Others Struggle

Amazon recently reported a 28 percent jump in sales with a profit of $513 million in the first quarter of 2016. The first three months of the year saw a phenomenal $29.1 billion in sales, thanks in part to the success of Amazon's own Kindle and Fire tablet computers as well as the Amazon Echo. And while Amazon grows and begins to open brick-and-mortar retail stores, large retail competitors like Walmart, Macy's, and Sears announce large layoffs and are closing stores.

After the lackluster earnings from Apple and Microsoft recently, it appears that Amazon is bucking the current trend by surging ahead of the competition and many technology giants. However, many of the media outlets reporting on Amazon's success across the globe fail to understand exactly how and why the company not only achieves continuous growth but also seems to select the best new areas to jump into.

Leaders within the retail industry desperately want to learn the secret to Amazon's success, but all too often they repeat the same old mistake of paying more attention to the competition than to the forces that are shaping the future.

When leaders do take the time to think about the future, they quickly discover that there is no shortage of trends to review. Let's face it, there is a long list of companies as well as individuals who either publish their trend lists or write a blog stating their top five — and they just keep piling them on. Trends are like ideas — there has never been a shortage. The problem is figuring out which ones to act on. The risk of being wrong can be enormous. And as we have all seen in recent years, not acting can be even worse!

As you can tell from the title of this article, Amazon's secret success strategy has been to be anticipatory by identifying the Hard Trends that will happen and using them to innovate with the confidence certainty provides. Before going into this powerful strategy in more detail, let's look at what Amazon is doing that's invisible to most. I'll bet it is far more than you realized.

Redefining E-commerce

There are around 50 million online shoppers who are choosing to pay $99 a year for the Amazon Prime service. In addition to offering free, super-fast delivery of items, Prime also serves as an alternative to Netflix with a growing catalog of movies and TV shows. The service is becoming increasingly attractive to those who want to, or already have, cut the cord to cable TV.

Many fail to realize that 74 percent of Prime members also purchase items on a regular basis from Amazon. When delving deeper into these stats, you are hit with two that are quite staggering:

1. Forty-four percent of all online shopping takes place on Amazon.
2. Over the 2015 holiday season, 51 cents of every dollar spent online went to Amazon.

While many retailers continue chasing customers and bombarding their email inboxes with generic and irrelevant marketing messages, Amazon uses data analytics to provide shoppers with what they are interested in, when they are most likely to want it. And the level of personalization increases for Prime members. That's one of many reasons why 60 percent of Amazon shoppers are Prime members who love the benefits of membership, making it easy for Amazon to keep its best customers coming back for more.

Capturing customers and bombarding them with value creates an elite club in which friends, neighbors, and families share stories of how Amazon keeps finding new ways to exceed expectations, such as an ever-growing list of items that can be delivered within a few hours. Amazon CEO Jeff Bezos famously said, "We want Prime to be such a good value, you'd be irresponsible not to be a member."

Creating Its Own Private-Label Brands

Amazon's available inventory contains over 50 million different products, with 75,000 new items added every day. But the big news to many is the introduction of private-label brands such as AmazonBasics (electronics accessories), Pinzon (kitchen gadgets), and Elements (health and beauty products). The list of private-label categories is expanding fast, and by creating its own brands, Amazon is once again growing and strengthening its offering without most people noticing.

A Growing Logistics Company

With 125 fulfillment centers and 23 sorting centers across the globe, nobody can accuse Amazon of not thinking big enough. With over 4,000 branded trailers, and leasing 40 767 jets, the company is indeed on the move in many ways and could easily be labeled a logistics company.

From the beginning, Amazon has used an anticipatory strategy rather than a reactive or agile strategy, unlike most of its competitors. By learning to separate the Hard Trends that will happen from the Soft Trends that might happen, Amazon arms itself with a powerful choice: to take action and become the disruptor, or wait and become the disrupted.

By using Hard Trends to select the areas it would disrupt, Amazon went beyond focusing on the profitability of the quarter and used the methodology to bring a high level of strategic clarity to its planning. By separating future facts from possibilities and assumptions, Amazon used that knowledge to anticipate disruptions, problems, customer needs, and game-changing opportunities.

With an all-consuming focus on its value proposition of selection, price, and customer experience, and raising the bar on them continuously, should we be surprised by Amazon's success? The biggest lesson to learn from the company's inspirational success story is how it understood the strategic importance of being anticipatory rather than reactionary.

Cloud Services

For example, when it became apparent that cloud computing was becoming a Hard Trend, did Amazon look around to see what everyone else was doing? Of course not. Instead, it focused on the creation of Amazon Web Services (AWS) to obtain a sustainable advantage in the future. It's this anticipatory mindset that delivers great things. AWS sales have rocketed to $2.57 billion, which is up 64 percent from last year, smashing analyst predictions. Microsoft Azure made a few waves in the industry with $560 million in revenue, but it remains considerably behind AWS's lead.

Amazon does not compete or imitate its competition. Copying Walmart would merely result in becoming Walmart. Companies in every industry should be following their own path by lowering risk and taking action by using Hard Trends to shape the future. The time has come to replace competing with initiating and creating; it is that simple.

Manufacturing-as-a-Service

I believe that Amazon's next move will be to purchase industrial-grade 3-D printers that smaller companies and individuals won't be able to afford. This will enable the launch of yet another virtualized service, Manufacturing-as-a-Service (MaaS), that will allow any user to be a manufacturer of custom products to deliver anywhere, anytime, and to anyone.

This represents a fantastic opportunity for anyone with an idea for a product to upload a CAD drawing to Amazon, which will make and dispatch items to clients. Even if you don't know how to turn an idea into a comprehensive design, there will be a wealth of people to help you, from sites such as Fiverr or Upwork, as the so-called gig economy gathers steam.

Many in the corporate world spend too much time scratching their heads and wondering what the future holds, clinging to their reactionary past. Amazon, with its anticipatory mindset, can see beyond the fog on the horizon to know that in the very near future, anyone will be able to be a manufacturer or turn an idea into a business using a set of virtual tools.

Failing Fast to Learn Faster

When a new product or service is not working, end the pain, share the lessons learned, and move on. Rather than rushing in and protecting and defending the product or service that's not working, develop a metric to evaluate when it's time to cut your losses and move on. In a letter to shareholders, Jeff Bezos proudly called Amazon "the best place in the world to fail." If you're not making mistakes and experiencing some failures, you're not innovating. Failing is not the problem — failing slowly is. And when you do fail, instead of hiding it, licking your wounds and moving on, as most do, share the lessons learned.

Growing B2B E-commerce

While some organizations still purchase their equipment from catalogs, most are unaware that the Amazon Business marketplace site hit over $1 billion in sales in less than a year. Quietly modernizing the market by encouraging its users to bring their shopping habits into the workplace will further cement Amazon's "everything under one roof" ethos.

A Major Grocery

Amazon's expansion into the grocery sector initially raised a few eyebrows, but it is also experiencing tremendous growth. While traditional big-box grocery stores such as Walmart and Target are seeing their sales decrease by 4–5 percent, once again it's Amazon that is riding the wave, with an increase of 18 percent in the first quarter alone this year.

Whatever your needs or requirements, you can be sure that Amazon will be working on providing a new service that anticipates your future needs, and it does so by identifying the Hard Trends shaping the future.

On the surface, it's easy to see why people jump to the conclusion that the key to Amazon's success is being agile, responding to change faster than anyone else. But when you look at the level of Amazon's ability to place big bets on where the future is heading — and win! – it's clear that agility would not provide that capability. Amazon's secret weapon from the beginning has been having an anticipatory mindset and using Hard Trends to shape its future rather than relying on reacting quickly as a way of competing with others.

The time has come to stop looking at the future with yesterday's eyes. We are doing things today that were impossible just a few years ago. And in just a few years we will be doing things that are impossible today. Ask yourself if you would rather react faster than your slowest competitors or learn to use the Hard Trends that will happen to anticipate disruption, problems, customer needs, and game-changing opportunities. The choice is up to you.

"We asked Daniel Burrus to be the closing speaker at a recent conference for CIOs. That's a tough slot to fill, as participants often have meeting fatigue after several days of meetings and networking. However, the room was full, anticipation was high, and he engaged participants to the very last minute. He was an excellent speaker and rose to the challenge, providing a perfect end to a great conference."

—PHILIP ARBUCKLE, **SOCIETY FOR INFORMATION MANAGEMENT**

Is Digital DISRUPTION

KEEPING YOU AWAKE AT NIGHT?

Two of the biggest Hard Trends right now are around organizations moving their data into the cloud and the very real increase in online security threats we face on a daily basis. The fear of suffering a data breach or even data loss is unthinkable; it's what keeps most CEOs awake at night.

Network security is only as strong as its weakest link, and many are discovering that insecure application programming interfaces (APIs) are their Achilles heel. This is where we are starting to see a new wave of digital disruption, as conflicts are forcing a change in the technology landscape.

On the flipside of this virtual coin, the majority of security products out there do not have APIs. This makes it troublesome to apply effective security to data and areas that the software is unable to reach.

Meanwhile, businesses that are looking for cost-effective solutions are attempting to walk away from the world of hardware, operating systems, and application licensing by migrating their data into the cloud. These everything-under-one-roof solutions pass the biggest responsibilities to one company and rightly or wrongly assume that company will look after the safety and security of the data.

This fundamental change is slowly migrating users and businesses away from traditional security vendors. Cloud providers are witnessing a growth in their responsibilities and customer expectations as they step up their game to grab the opportunity.

According to Cisco and the International Institute for Management Development (IMD), digital disruption will displace approximately 40 percent of incumbent companies within the next five years.

Cisco is also predicting that by 2020 there will be an estimated 50 billion devices connected online. We need to expand our horizons to the Internet of Everything rather than just the Internet of Things. It stands to reason that as networks expand along with data volumes, the threat of cybercrime will also grow dramatically.

The migration of IT infrastructure to the cloud has obvious appeal to business customers. We all now reside in a digital world where being agile as well as anticipatory is the new currency. The flexibility and cybersecurity offered by many of the cloud-based solutions provides much-needed protection around customer data. But where does this leave traditional security vendors?

Amazon (AWS) and Microsoft (Azure) seem to have the most to gain from this latest round of digital disruption. Traditional reactive security is increasingly being seen as less valuable, and sometimes fragmented and disjointed, in a world that demands the addition of prediction and prevention. The consensus across the industry is that once again, the old way of doing things just doesn't work for the cloud.

That the speed of technological change has allowed Airbnb to possess more capacity than the top three largest hotel chains combined speaks volumes. Resisting transformation is no longer an option as the digitization of everything sets its sights on destroying inertia.

Falling behind and failing to adapt to the continuously evolving landscape are already proving to be the difference between failure and success for modern businesses. With security and resilience at the top of the agenda, traditional security vendors face an uphill struggle to reinvent themselves. Remaining relevant to organizations that are heavily reliant on cloud solutions and APIs will be vital in securing their survival.

The key to surviving in this age of exponential change is to promote an anticipatory mindset and strategy to make digital disruption your biggest competitive advantage. Once again the Hard Trends (trends that will happen) are there for all to see when they take the time to learn how to identify them. Businesses are increasingly moving their infrastructure to cloud-based solutions, and they are finding a lack of security options around their APIs. This represents a big opportunity.

Will traditional security vendors up their game and embrace these changes? Or will they cling to old business models and begin a rapid decline? The only real question is this: How much longer can traditional industries continue to ignore these Hard Trends?

Beating CYBERCRIME

BEFORE IT HAPPENS TO YOU

To understand why cybercrime is rapidly growing, as well as the seriousness and impact it can have, we need to compare it with the more traditional and visible aspects of street crime. If we were to break it down into the business language that we all understand, what is the ROI of crime, both online and offline?

Robbing a physical bank does offer potential rewards to criminals, but at a very high level of risk, including getting shot. There will most likely be witnesses and CCTV footage that will increase your chances of getting arrested or jailed. There are usually helpers who can also be caught or killed, including a getaway car driver and people who will give you cash in unmarked bills for whatever you have taken. You get the idea, the list often goes on.

Online crime, on the other hand, is a different story, offering much lower risk and much greater reward. For example, cybercrimes are not usually detected right away, sometimes taking weeks or months to discover. There is a lack of eyes observing the act, and because it is often carried out from another country, it is notoriously difficult to track and locate online criminals.

Legal systems throughout the world differ significantly, and even if online criminals are caught, extraditing them is often not as easy as authorities would like. When looking at crime through business eyes, it's easy to see why online criminal activity is the fastest-growing crime in America.

Technology has famously disrupted industries across the globe, but the criminal underworld is not an area that immediately springs to mind. Crime figures released by law enforcement agencies will often reveal a significant drop in traditional crime, but seldom include victims of online crime. The crime rate in England and Wales soared when they made the brave decision to include cybercrime for the first time.

The increase of high-profile data breaches has recently put cybersecurity on the map. Rather than waiting to be the next victim, companies need to go beyond reacting and responding to attacks, and consider using new tools to predict and prevent the crime, including behavioral analytics. In addition, real-time analytics and deep learning algorithms can learn from every cybercrime ever committed to detect and ultimately prevent new variants attacking a company network.

The rise of cognitive computing from tech leaders such as IBM Watson, alongside advances toward quantum computing, will usher in a new age of collaboration. Security-as-a-service (SaaS) will encourage working together rather than alone. Company to company and organization to organization, there is a realization that learning together is better than learning by ourselves.

If every attack experienced was fed into one central repository so that every conceivable pattern of attack was analyzed and learned from, it would be a significant step forward for the good guys.

Traditionally, people do not change their lifestyle habits until the doctor tells them they are obese and need to take action. Equally, many seldom invest in home security until they have been burgled. These are textbook examples of a reactionary mindset and something we need to change sooner rather than later.

We need to snap out of the "out of sight, out of mind" mentality and understand that it would be much easier to anticipate and pre-solve predictable problems. For example, there has not been a high-profile mobile cybercrime yet. It is relatively easy to predict that there will be a major mobile hack or cybercrime in the very near future. Do we wait until it happens before reacting, or prepare for it right now?

Our primary computer has evolved from a desktop PC to a laptop and now to a mobile smartphone or tablet. For this reason alone, we know for certain that this will be where many future attacks will occur. This is a wake-up call to become anticipatory by adopting a predict-and-prevent strategy to prepare now before it happens.

The golden rule to remember is that if it can be done, it will be done, so why let it happen to you? Would you rather your company be caught in the headlines reacting to an attack that is featured on every news channel in the world? Or would you sooner be the organization that walks away with its reputation still intact?

Educating employees and investigating new options such as cognitive computing and deep learning algorithms, as well as behavioral analytics that can shut down threats within a few milliseconds, are just a few of the small steps you could be taking today. The only question that remains is, why aren't you acting on this now?

Cybercrime has a much higher ROI for criminals than physical crime, and that means it is evolving alongside our digital lifestyle. The technology we take for granted could easily be used against us. It's time for you to take a closer look at what you are doing now to prevent a future problem. Will you be anticipatory or reactionary? The choice is yours.

Pre-solving Predictable PROBLEMS

IS BETTER THAN EXPERIENCING THEM

On an almost daily basis, we read stories about how every industry is facing digital disruption. Although there has been a flurry of negative articles warning how we are heading for a dystopian technological future, the reality is that disruption has always happened; it is the speed at which it happens that has changed. Way back in 1942, Joseph Schumpeter coined the phrase "Creative Destruction" to describe something new that kills something old.

Dominant and seemingly untouchable brands have disappeared over the years. It was only 15 years ago that Nokia ruled the world of mobile phones. Its ubiquity ensured that people didn't even need to talk about the brand itself and referred to handsets by their numbers, such as the famous 3210 that so many people loved.

Many have questioned if what people are calling the sharing economy will replace the economy we have now. There are also countless examples of businesses retiring roles from our past and replacing them with new, relevant jobs that transform industries. The disappearance of iconic brands, such as Pan Am, Enron, and Blockbuster, to name a few, illustrates how our world can change dramatically very quickly.

Could a major technology company, one that has been on the leading edge for years, face disruption? Earlier this year, we learned that Google paid Apple $1 billion to keep its search bar on all Apple devices. In addition, the search engine behemoth continues to pay a percentage of any revenue that it generates from an Apple device. Although the exact figure is unknown, it was revealed in court to have been as high as 34 percent. Google objected and asked the judge to strike the mention of this highly sensitive figure from the record. But the number itself is irrelevant; it's the over-reliance on another platform that creates concern.

Another revealing statistic is that 75 percent of Google's mobile advertising revenue comes from Apple's iOS devices. This raises several questions around what would happen if Apple suddenly refused to accept the $1 billion and removed the Google search engine from all of its devices. Could this high dependency on Apple be Google's Achilles' heel?

If Yahoo!'s Marissa Mayer had succeeded in her plan to persuade Apple to replace Google with Yahoo! Mobile Search, would the fortunes of both companies be very different right now? With the majority of mobile ad revenue being generated on a competitor's platform, it becomes very easy to see how even the most powerful search engine in the world has vulnerabilities.

The massive untapped Chinese market, for example, has been troublesome for Google, with many of its services blocked by government firewalls. Google is uncomfortably dependent on Apple in this area and needs to prepare for the eventuality that Apple could pull the plug at any moment to create its own solution or sell to a higher bidder.

Both Apple and Google have been using what I call an anticipatory methodology to rapidly grow to the size and power they enjoy today. Apple has been increasingly using its anticipatory strategy to design and leverage its strong position in hardware. An interesting article in *Apple Insider* went as far as suggesting that Apple could be planning to "starve Google's core business into irrelevance by targeting the valuable foundation of Internet ads."

As we all know, the devil is always in the details. It's hard to tell if this is Apple's strategy at this time. On the other hand, it is relatively straightforward to demystify technological change and find certainty in an uncertain world by focusing on being anticipatory rather than getting good at reacting faster than others. There is already evidence that Google is protecting its

Daniel Burrus

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business by leveraging a number of Hard Trends to shape its future rather than dig in and compete with others.

Google has never been a conventional company and seems to understand that innovation can be applied to corporate structure, not just products and services. For example, in Google's continuing efforts to experiment with an ever-increasing number of potentially game-changing projects, it looked ahead at the predictable problems it would face regarding its corporate structure and pre-solved those future problems by creating the parent company Alphabet last year. This was a powerful way to turn a future organizational problem into an opportunity. By becoming a modern version of Warren Buffet's Berkshire Hathaway, Alphabet will provide a much better way to accelerate growth and extend Google's ongoing influence in our lives.

To thrive in this new age of exponential change and growing uncertainty, it is now imperative to anticipate both problems and opportunities in the future by learning what Apple and Google have learned: how to use the certainty of Hard Trends to drive innovation and actively shape the future.

AO

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Attracting and Retaining the BEST EMPLOYEES

It's no revelation that great organizations are made up of great people. That means it's imperative that organizations of all types and sizes have a firm strategy in hand for identifying, attracting, and retaining top talent.

But for Anticipatory Organizations, hiring the "best" goes further than an appealing pitch followed by a welcome-aboard handshake. Bringing the best people into your organization and keeping them also mandates that once talented people are on the job, their skills not only prove a suitable match to their responsibilities, but continually serve to help move the organization forward.

That puts the challenge of hiring the best people into a completely different context.

What Matters to Employees

The expense of having to replace employees who, for whatever reason, don't remain with an organization is, frankly, hard to pin down. But what is clear is that it can prove exceedingly costly. One study by the Center for American Progress found that, for mid-level employees, the typical cost of turnover was 20 percent of salary. For a mid-level worker making $50,000 a year, that's $8,000.

It would be easy to assume that money—enough of it, that is—is the defining factor in happy, committed employees. But that's not necessarily the case. For instance, in one study, researchers found that more than three-quarters of all employees value career growth. In another compelling finding from a study by the Society for Human Resource Management, employees also stressed the value of an environment of trust between all employees and senior management.

What an Anticipatory Organization Can Do

Making certain your employees receive competitive wages and benefits is a solid strategy for attracting premier talent. But equally valuable are other components that not only pinpoint the right hire but also help keep valued employees engaged and rewarded:

- **MAKE YOUR ORGANIZATION INCLUSIVE.** One central caveat in my Anticipatory Organization Model™ is what I refer to as ending the war between young and old—the many divisions that come between younger and older employees. When looking to hire the best person, bear in mind the balance of your workforce between experienced employees and newcomers eager to learn all they can. Further, make certain that your organization recognizes the value that the experience and wisdom of older employees brings, as well as the open minds and knowledge of new technology younger employees bring to the table.

- **A FOCUS ON RE-INVENTING PRODUCTS, SERVICES, AND PROCESSES.** If new employees feel that they are entering a time machine backward when they work for you, the best and the brightest won't stay long. On the other hand, if they feel like you are actively reinventing the business in order to thrive in the years ahead and believe that the business needs new thinking and innovative ideas to do that, they will be far more likely to stay and to tell a talented friend about job openings.

- **KEEP YOUR TECHNOLOGY CURRENT.** Employees willing to join and remain with an organization naturally want the best tools available with which to do their jobs. Ask yourself if this describes your organization's technology. Is it as current as possible or an ongoing headache for employees? An organization willing to invest sufficiently in productive technology sends the message that talented employees warrant the means with which to leverage that talent.

- **MAKE INNOVATION AN ACROSS-THE-BOARD JOB DESCRIPTION.** An Anticipatory Organization doesn't break out innovation as the purview of one person or group. Rather, it encourages people at all levels to employ anticipatory thinking by identifying and pre-solving predictable problems and looking for ways to make everything they do even better. From there, it fosters a culture of innovation in which everyone is a stakeholder, rather than just a select few.

- **REWARD DESIRED BEHAVIOR.** This is another bedrock of an Anticipatory Organization. The dynamic is simple—for instance, if you want employees to pursue innovation, make certain suitable rewards are in place to encourage that. If you want to boost collaboration, make certain that's suitably rewarded as well.

- **BUILD A CULTURE OF TRUST.** The Society for Human Resource Management study was definitely onto something when it identified trust as a bona fide value, for both current and prospective employees. Trust, of course, has to be earned–through values, delivering on promises, honesty, integrity, mutual respect, and similar core attributes.

Looked at in an anticipatory framework, hiring the best people is a decidedly win-win scenario. If you get the best people, chances are good that you have the means in place to keep them on board.

Why Your Corporate CULTURE MATTERS

As I travel around the world, working with executives from a wide range of businesses, I find it very interesting that some understand the value of, and take great pride in, their corporate cultures, while others don't give them much thought. I have also noticed that those who value them the most tend to do far better over time.

Corporate culture has been the subject of many articles and books for years—and with good reason. Organizations of all sizes and activities are reexamining the advantages a strong culture provides and are coming to embrace the value of a culture that everyone within an organization understands and supports.

But from the perspective of an Anticipatory Organization, culture can mean more than it might to other companies and groups with less of a future focus. And in terms of surviving and thriving, that can make all the difference.

Corporate Culture—Yours and Yours Alone

Although specifics may vary, corporate culture generally refers to the pervasive values, beliefs, and mindset that characterize a company and, further, help shape and drive its practices. To a certain degree, culture may be defined by, or overlap somewhat with, an organization's mission or vision statement. Culture may also refer to things such as physical environment, dress code, employment practices, and any number of other areas.

Despite the fact that corporate culture may be defined differently, its value and application are straightforward. That's because your corporate culture is singular to your organization, and is yours alone. Products, services, and processes can all be copied or mimicked from one organization to another, but the competitive advantage that is shaped by your culture , especially if it is characterized by a shared mindset, cannot be replicated.

Boiled down, it's really your organization's DNA. And the ramifications are widespread, from your ability to recruit and retain talented employees to how consumers see your products or services.

Culture—As Seen by An Anticipatory Mindset

Corporate culture matters to every organization. But, in a sense, an Anticipatory Organization sees culture in a particularly broad context. To begin with, an Anticipatory Organization has higher levels of certainty, and the confidence to make bold moves, because it knows how to separate the Hard Trends that *will* happen from the Soft Trends that *might* happen, among other elements of my Anticipatory Organization Model™. Using these and other principles, these organizations foster cultures through which predictable problems, disruptions, and new opportunities can be identified and addressed *before* they occur. In effect, it is part of their cultures not only to be agile, reacting faster than slower competitors to unpredictable events, but also to know how to apply anticipatory principles to accelerate innovation and turn change into an advantage.

In addition, an Anticipatory Organization encourages people at all levels to employ anticipatory thinking—and, from there, to build a culture of innovation in which everyone participates in innovation, rather than just a select few. Further, it has a suitable rewards system in place to further acknowledge and encourage ongoing attention to innovation at all levels.

An Anticipatory Organization's culture can also be defined by what I refer to as a shared Futureview. Futureview is your ability to place yourself in the future and then look back at your present position. Futureview is the picture you hold, for better or worse, of what you expect and believe about your future.

But Futureview's impact isn't limited to what you see coming in the months and years ahead. How you view the future shapes how you act in the present, and how you act in the present shapes your future. Your Futureview determines the future you.

Take a moment to think how that element of your culture can affect your organization. For instance, some of your employees may have a very positive Futureview—they see a bright tomorrow for themselves and likely connect that optimism with their roles in your organization. As a result, they're more committed to every element of what they do to help your organization grow and succeed.

By contrast, consider employees with negative Futureviews. For them, the outlook is decidedly less optimistic, and many would say the good old days are behind them. They don't see positive futures for themselves, nor do they likely have upbeat views of your organization. As a result, their present performances suffer. They feel they have little to look forward to, so why put in the extra effort?

In the end, corporate culture is extremely important, but it can tilt in either direction. Which direction do you want your organization's culture to follow?

Can you afford your LEGACY SYSTEM?

Like someone who balks at throwing out a threadbare T-shirt unfit to wear in public, many organizations are slow, or even hesitant, to upgrade their legacy technology.

The reasons for this can vary from the fact that all of their systems are running on it, to the time and expense of modernization, to a more watered-down rationale: "If it isn't broken, why fix it?"

In a world characterized by exponential change, that can prove to be a serious misstep. Sticking with outdated technology of all sorts can be exceedingly expensive, especially if you look beyond financial parameters.

The Risks of Staying the Legacy Course

Although many organizations have plenty of reasons why they "can't" update their outdated technology, or why they are moving so slowly, the risks of failing to do so are increasingly filling newspaper columns and the Internet. In another blog, I noted how outdated technology grounded thousands of aircraft for both Southwest and Delta Air Lines.

In a more recent episode, British bank Tesco shut down online banking in early November after 40,000 accounts were compromised, with half of them being hit by fraudulent transactions by hackers. Andrew Tschonev, technical specialist at security firm Darktrace, was blunt in his assessment that outdated security measures were a primary reason for the breach. "With attackers targeting everyone and anyone, today's businesses cannot safely assume that it won't happen to them," he said.

More Than Just Bad P.R.

Obviously, high-profile incidents like the ones I just cited don't make for the most glowing headlines. But there are even more reasons not to turn a blind eye to outdated, potentially destructive legacy technology:

- **STICKING WITH THE OLD IS FAR MORE EXPENSIVE THAN YOU MIGHT ASSUME.** No one will argue that revamping outdated technology can be an expensive proposition. But so, too, can sticking with systems whose best days have come and gone. Here's evidence: A study several years ago by Unisys and MeriTalk reported that the federal government spends more than $35 billion trying to maintain legacy systems, and even with that amount of money, efforts at modernization were still running behind.

- **YOU RUN THE RISK OF LOSING CUSTOMERS.** No matter what industry your organization may be in, your customers will lose confidence if they see you are clinging to the past. Offering outdated solutions and ideas that derive from equally outdated technology may only prompt customers to look to others who understand the future and where they are going better than you do.

- **YOU RUN THE RISK OF UNRELIABILITY.** Many organizations that hold on to legacy systems attribute the decision to the "fact" that the systems still work. That may or may not be the case, but consider what may happen if or when something goes wrong. For one thing, as the airline example underscores, having outdated technology in place only boosts the risk that something eventually is going to misfire (in the case of Delta's shutdown, it was discovered that some 300 of its 7,000 data center components had not been configured correctly). And, should something go amiss, older technology may simply not be bolstered by adequate vendor support as manufacturers turn their attention to newer products.

- **THE PEOPLE WHO UNDERSTAND THE TECHNOLOGY ARE RETIRING.** Younger tech talent, the ones replacing your retiring Baby Boomers, have little interest in learning how to maintain and fix outdated technology.

It Hurts Your Brand and Looks Bad to the Public

As I discussed earlier, a high-profile technology failure that derives from legacy systems simply doesn't look good to the public at large—an issue made ever more prevalent with the exponential growth of social media.

But in working with organizations of all sizes and types, I emphasize that leaders also need to be aware of the message they're sending to every one of their employees. Not only will younger employees who are comfortable with technology react negatively to having to cope with the limitations and headaches that outdated systems and networks can foster, but a such annoyances may prompt them to begin looking for new employers who are more willing to invest in adequate, up-to-date infrastructure.

As I emphasize in my Anticipatory Organization Model, in a world of technology-driven exponential change, saying yes to upgrading can be expensive. But saying no to updating outdated technology can be even more costly.

Blockchain is a Disruption AND AN OPPORTUNITY

When Bitcoins were introduced in 2009, they were the first cyber currency. I labeled them a Soft Trend—one whose future was looking good but not certain. At the same time, I identified cyber currency as a growing Hard Trend that would continue; accordingly, I suggested there would be many more cyber currencies in the near future. Both have held true, as the success of Bitcoins, although promising, is not a future fact, and there are more than 100 cyber currencies to date.

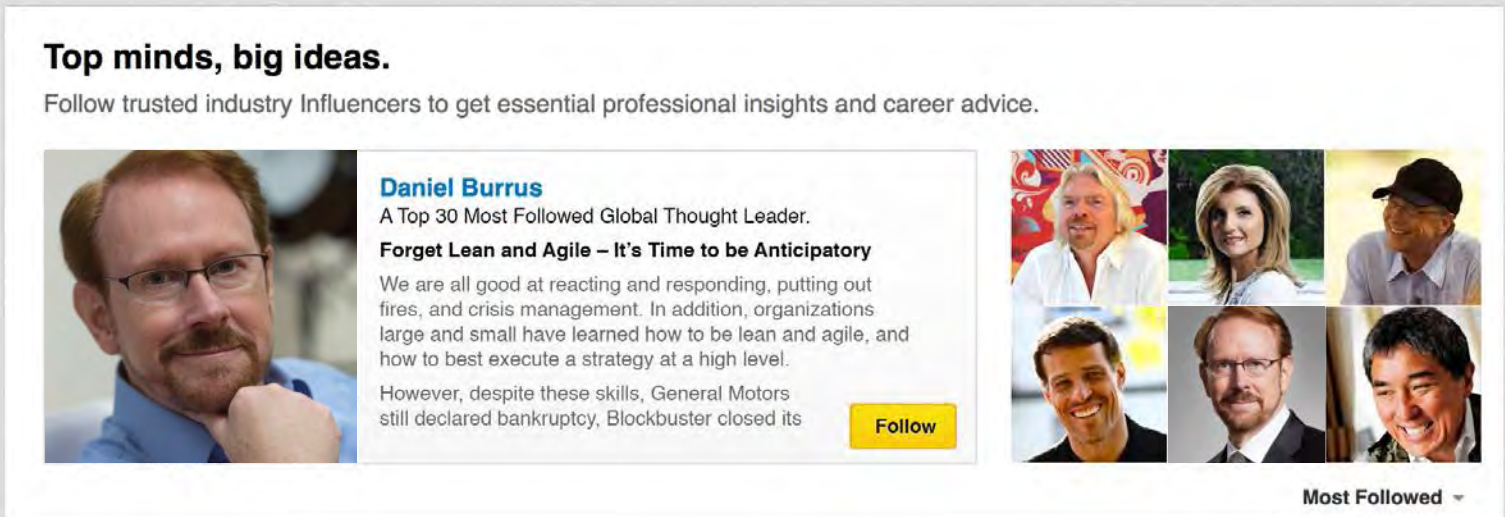
As it happens, the enabling technology with which Bitcoin transactions are handled has gained far more traction. The rapidly evolving technology of blockchains represents a Hard Trend that will continue to grow. It holds enormous promise for game-changing disruption across any number of industries and fields.

Blockchain Explained

For those who may be unfamiliar with the term, blockchains are a system of decentralized transaction records. By decentralized, I mean that a blockchain can be used to create a transaction without any input from any sort of controlling entity.

In one of their most widely known applications, blockchains can send and receive digital forms of currency, such as Bitcoins. But the system can't be accessed by just anyone. Users can send digital payments only to other participants in the same blockchain network. That means only those who use the blockchain can establish and enforce rules and approved procedures—a powerful form of security.

But there's another level of safety. Instead of a controlling entity determining whether a particular transaction is legitimate, it's up to the entire network to make that call.



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That means if someone tries to tamper with a ledger entry, the rest of the network will disagree on the integrity of that particular transaction and will not incorporate it into the larger blockchain.

More Than Just Money

It's obvious that blockchains offer enormous opportunity for use in financial transaction applications. But blockchains also represent a platform that can be used in multiple ways in many industries and other areas. For instance:

- **DATA STORAGE**—Current storage services such as the cloud are centralized, meaning that users have to put their faith in a single provider. Blockchains will let users store data and information via a decentralized platform, improving security and lessening reliance on any one provider. Additionally, systems are being developed through which users can rent out unused space—a data storage version of Airbnb!

- **VOTING**—No one who has ever worked in a polling place recalls the tedium of counting paper ballots with any sort of fondness. Unfortunately, electronic balloting has its own drawbacks, such as verifying accuracy during recounts. On the other hand, a blockchain voting network is inherently more reliable, since changing one vote would require changing countless other votes at the same time. In fact, a blockchain voting network has already been used—Denmark's Liberal Alliance successfully employed a blockchain for internal voting in 2014.

- **MILITARY USE**—Military organizations such as the U.S. Department of Defense and NATO are actively investigating use of blockchains. Among other applications, they're interested in messaging platforms capable of transferring information and data by way of a secure decentralized protocol. Further, the blockchain will ensure security across multiple channels.

- **REGULATION**—Because a blockchain cannot be changed or manipulated without a majority of participants agreeing to do so, the technology underlying a blockchain might be used in place of regulations, such as those mandated by Know Your Customer (KYC) guidelines and Anti-Money Laundering (AML) compliance.

At The Base of the Mountain

Currently, blockchain use is largely restricted to private forms of transactions. But, looked at in an anticipatory way blockchains could be used for anything that requires proof of identification—the exchange of goods or verification of contract terms and other agreements. Talk about the opportunity for disruption!

One executive involved in the development of blockchains summarized its potential in a framework we can all appreciate: 'Check it on the blockchain' will be the phrase of the twenty-first century. It will be as commonplace as people saying 'Google that.'

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IoT: AT HOME AND ON THE JOB

Consider the Internet of Things (IoT). You may have read about or even have a home security system that you operate via your smartphone. Maybe it's the tabletop device that plays your favorite music and also responds to a voice command to turn on the sprinklers.

But IoT is far more than that, and it's poised to transform the way you do business. Anticipatory individuals and organizations are just as poised to leverage this significant trend.

IoT Solutions Growing

The emergence of IoT projects is rapidly gaining traction within companies. In its third *Global IoT Decision Maker Survey* this summer, IDC polled 4,500 professionals and found that nearly a third (31.4 percent) had already launched an IoT solution. An additional 43 percent said they were planning similar debuts in the next 12 months. That means that most enterprises will have at least one IoT solution up and running within a year's time.

But it's not just a question of organizations jumping on the IoT bandwagon with an exclusive focus on consumers. It also marks a recognition of the internal potential of IoT. To that end, the IDC study found that more than half (55 percent) of organizations view the IoT as part of their competitive strategy through potential cost reductions, improvements in productivity, and process automation.

Caveats and Opportunities

Although organizational use of IoT is growing, concerns persist. One has to do with cybersecurity, given the enormous amount of data and information moving back and forth. "This carries immense cybersecurity risks to data and systems that enable this hyperconnectivity," said Guy Caspi, CEO of Deep Instinct.

Caspi has a point. Using compromised cameras, hackers brought down a number of major websites in late October. Futhermore, *Forbes* reported that hackers are selling access to IoT devices designed to cripple extensive web connections.

October's shutdown highlighted the opportunity afforded companies researching anticipatory counter measures to such security risks: "This opens the door to innovative cybersecurity solutions that can effectively handle these risks," said Caspi.

Jerry Dolinsky, CEO and president of Verisae, went further, underscoring the need for more anticipatory thinking and execution: "Service companies must change their business models if they are to embrace and leverage the Internet of Things. They must run a more proactive model that does more than react to broken systems. They must proactively monitor for issues and then take action before those issues lead to breakdowns." In other words, we must be more than reactive and agile; we must also be anticipatory when it comes to cybersecurity.

Business Models Transformed

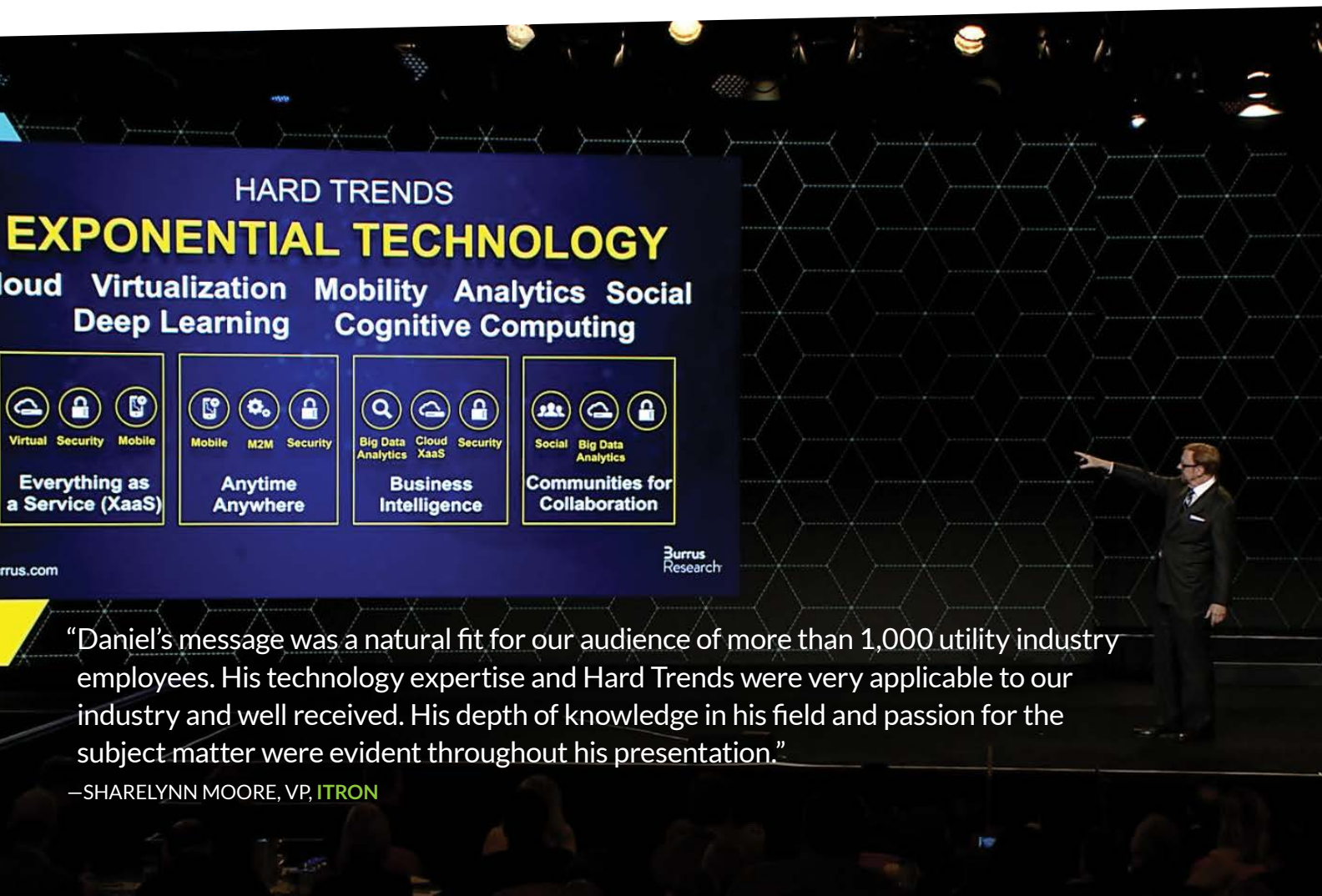
Security concerns aside, the overall exponential growth of IoT is undeniable. Estimates hold that there will be more than 100 billion Internet-connected things across the world by 2020—a mere few years away.

That sort of growth means more than just proactive solutions to growing security worries. As a *Harvard Business Review* article points out, IoT connectivity affords enormous opportunities for those organizations that recognize IoT's game-changing impact on both value creation and value capture and adjust their business models accordingly.

"In a connected world, products are no longer one-and-done. Thanks to over-the-air updates, new features and functionality can be pushed to the customer on a regular basis," writes Gordon Hui of Smart Design. "The ability to track products in use makes it possible to respond to customer behavior. And of course, products can now be connected with other products, leading to new analytics and new services for more effective forecasting, process optimization and customer service experiences."

To that end, an increasing number of companies are eager to show just how IoT is literally transforming the very heart of their operations. For instance, the Internet of Things World Europe event slated for Dublin, Ireland, in November will showcase such luminaries as Uber, Virgin Active, John Deere, and MasterCard, all of which have implemented significant IoT solutions.

You may not be able to make it to Dublin, but it begs the question: What are you and your organization doing to investigate the enormous game-changing opportunities offered by the growing IoT?



"Daniel's message was a natural fit for our audience of more than 1,000 utility industry employees. His technology expertise and Hard Trends were very applicable to our industry and well received. His depth of knowledge in his field and passion for the subject matter were evident throughout his presentation."

—SHARELYNN MOORE, VP, **ITRON**

Artificial INTELLIGENCE

WILL IMPACT YOUR INDUSTRY

Artificial intelligence (AI) is becoming very real—and at an exponential rate. Moreover, those organizations that leverage AI in sync with those Hard Trends and Soft Trends that are shaping the future stand to make the most of its extraordinary potential.

Anticipating Societal Shifts and Civil Unrest Using AI

On one level, artificial intelligence is poised to help anticipate and address such critical issues as cybersecurity, civil unrest, and even outright acts of terrorism. For example, using technology such as automated smart detection, officials at the recent Olympics in Rio were successful in maintaining security in a wide array of venues and locations.

Closer to home, the Central Intelligence Agency's deputy director for digital innovation, Andrew Hallman, recently addressed the issue of anticipatory intelligence at an event hosted by the government and technology website NextGov. Hallman spoke of the agency's greatly improved ability to predict potentially dangerous events days before they actually occurred.

"We have, in some instances, been able to improve our forecast to the point of being able to anticipate the development of social unrest and societal instability—some, I think, as near as three to five days out," he said.

Anticipatory Opportunities Beyond Safety

Organizations that identify and leverage the opportunity afforded by artificial intelligence and security matters stand to profit handsomely in the future. But the promise of AI isn't limited to issues of public safety.

It's no great revelation that consumers have always been and always will be hungry for greater convenience and faster results. Apps are decidedly handy and easy to use, but shoppers are growing tired of having to shift from one app to another, looking for more consolidated and faster means to purchase goods and services.

Consider: How might a platform be received that not only offered, in effect, the ultimate in "one-stop shopping" but, through artificial intelligence, further streamlined the experience by predicting what consumers would find appealing, no matter if it were an upcoming birthday or the Christmas holidays? What sort of game-changing opportunity could that sort of real-time knowledge and availability offer those organizations that anticipate what their customers want and when they want it?

It's happening already. On the surface, the semi-autonomous driving capacity of Tesla cars may seem both cool and useful, but so, too, is the vehicle's capacity to gather detailed driving information about routes and destinations to increase the accuracy of the systems in each car as well as to anticipate the user's future needs and interests.

Major players are increasingly tuning in to the potential of artificial intelligence. Corporate giants like Google, IBM, Facebook, Apple, and Salesforce are racing to acquire private AI companies, with Samsung emerging as a new entrant this month with its acquisition of startup Viv Labs, which is developing a Siri-like AI assistant. And it would be foolish to take your eye off Amazon and its AI applications. Roughly 140 private companies working to advance artificial intelligence technologies have been acquired since 2011, with over 40 acquisitions taking place in 2016 alone.

They all see the game-changing opportunities afforded by AI. What about you and your organization? Will you wait and react, or will you use the Hard Trend of AI to anticipate and innovate? The choice is yours.

"Daniel Burrus has a rare knack for technology predictions that provide us with a blueprint for change in the business world. *Flash Foresight* is the quintessential guide for emerging enterprises looking for what is next in a world full of innovations … A well-articulated tome of how learned behaviors can keep us a bit ahead of the curve in terms of navigating profitable, productive and strategically aligned ideas for business success. … Exquisitely well-informed, and accessible to both experienced business leaders and curious neophytes."
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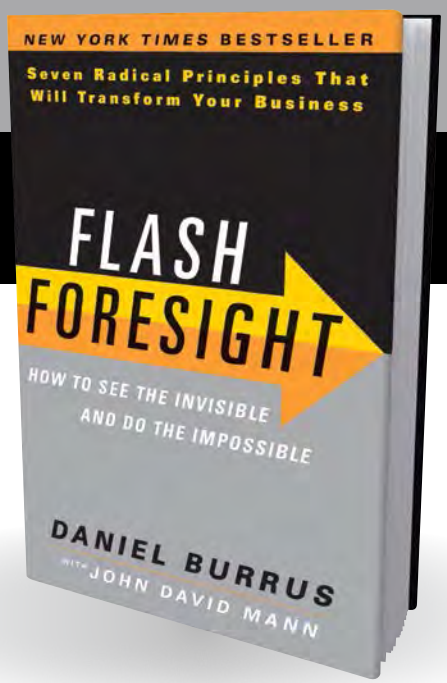

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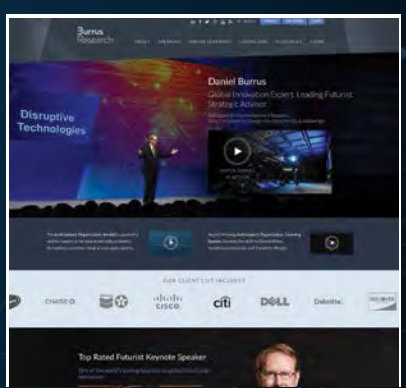

ABOUT
DANIEL BURRUS

Daniel Burrus is considered one of the World's Leading Futurists on Global Trends and Innovation. ***The New York Times*** has referred to him as one of the top three business gurus in the highest demand as a speaker.

He is a strategic advisor to executives from Fortune 500 companies, helping them to develop game-changing strategies based on his proven methodologies for capitalizing on technology innovations and their future impact. His client list includes companies such as Microsoft, GE, American Express, Google, Toshiba, Procter & Gamble, Honda, and IBM.

He is also a featured writer on the topics of innovation, change, and the future for **CNBC**, **Huffington Post**, and ***Wired Magazine*** to name a few.

He has been the featured subject of several **PBS** television specials; has appeared on programs such as **CNN**, **Fox Business**, and **Bloomberg**; and is quoted in a variety of publications, including ***The Wall Street Journal***, ***Financial Times, Fortune***, and ***Forbes***.

He has founded six businesses, four of which were national leaders in the United States in the first year. He is the CEO of Burrus Research, a research and consulting firm that monitors global advancements in technology-driven trends to help clients profit from technological, social, and business forces that are converging to create enormous, untapped opportunities.

His accurate predictions date back to the early 1980s, where he became the first and only futurist to accurately identify the 20 technologies that would become the driving force of business and economic change for decades to come. Since then, he has continued to establish a worldwide reputation for his exceptional record of predicting the future of technology driven change and its direct impact on the business world.

He is the author of six books, including ***The New York Times*** and ***Wall Street Journal*** best-seller ***Flash Foresight: How To See The Invisible and Do The Impossible***, as well as the international best-seller ***Technotrends***.

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