

Human Work in the Age of Machines

FIVE STEPS FOR BUILDING A FUTURE-READY FINANCE TEAM

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FUTURE-READY
FINANCE TEAM**

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**The accounting
and finance
profession is
endangered.**

Executive Summary

“If you’re not at the table, you may be on the menu.”

That modern proverb is most frequently attributed to politicians on both the right and the left, but it’s remarkably apt as a mantra for today’s accounting and finance profession — because that profession is, in a word, endangered.

If the trends, evidence, and experts are to be believed, the core transactional tasks that have defined our profession for generations — financial statement preparation, accounting, auditing, bookkeeping, and tax work among them — will soon be swept away by a coming tsunami of automation.

Within the next 30 years, artificial intelligence, robotics, machine learning, and other technologies will automate an astounding number of jobs, blue collar and white collar alike. It’s a near certainty. In fact, this wave of automation is already seeping into the accounting and finance profession. KPMG, Deloitte, and others are incorporating AI and machine learning into their traditional accounting functions like audit, accounting, and tax. Other organizations are sure to follow.

It seems the machines have all of the good seats in this high-tech game of Musical Chairs.

And the technology that is making all of this happen will become more sophisticated each day. Technology continues to improve and advance at an exponential rate. There’s no stopping that. These transformative advances will happen whether we like it or not. Anything that can be automated will be.

But all is not lost.

Machines can do a lot of remarkable things, but they can’t do *everything*. Humans have an advantage over machines in many notable ways, and a finance professional’s relevance in the age of automation depends on his or her ability to do the things that machines can’t do.

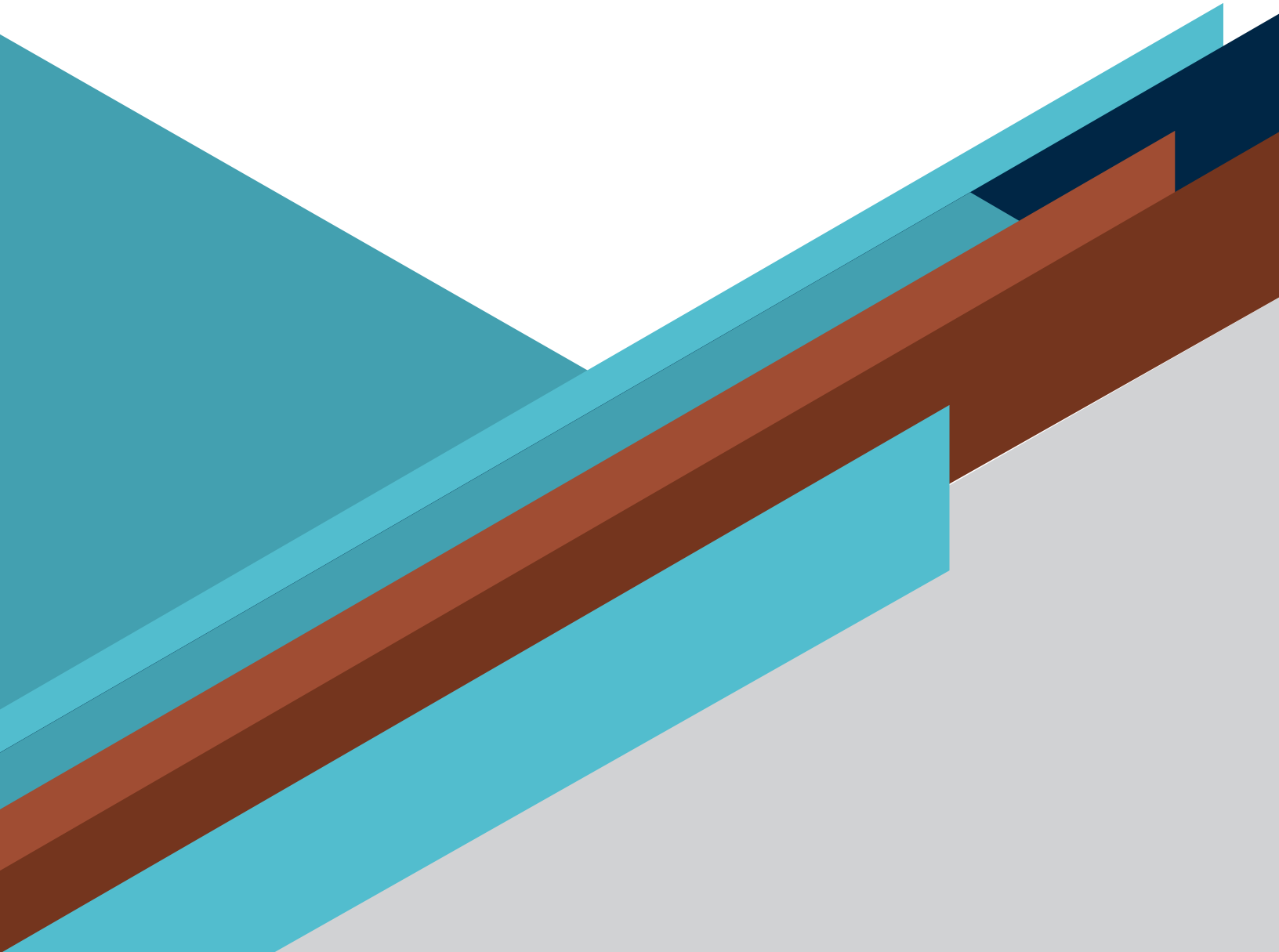
As futurist Peter Sheahan says, “Humans should only do work that only humans can do.”

Doing so means accounting and finance professionals need to learn a new set of skills — skills

geared more toward people than data. The future of our profession depends on our ability to think strategically and critically, to collaborate, to communicate, and perhaps most importantly, to anticipate — to spot future trends before they happen and position our organizations to take advantage of them once they arrive.

The future of our profession starts with our ability to out-learn the pace of change ... and our ability to help our clients do so as well.

In other words, the accounting and finance profession is dead. May it live long and prosper.



The Power of Exponential Change

There's no denying our profession is changing, and there's little doubt about what's to blame.

"In the next five years," says world-renowned futurist Daniel Burrus, "game-changing technologies will transform every business process, including how we sell, market, communicate, collaborate, educate, train, and innovate."

Adds World Economic Forum founder Klaus Schwab: "We stand on the brink of a technological revolution that will fundamentally alter the way we live, work, and relate to one another. In its scale, scope, and complexity, the transformation will be unlike anything humankind as experienced before."

Technology isn't just tweaking the rules; it's rewriting the playbook.

In their groundbreaking book *The Future of the Professions: How Technology Will Transform the Work of Human Experts*, Daniel and Richard Susskind offer an illuminating illustration of what that type of technological transformation might look like:

"Start by imagining an ordinary sheet of paper of unremarkable weight. Now imagine repeatedly folding this sheet in half," the Susskinds write. And ignore the fact that one can't physically fold an ordinary sheet of paper more than seven times. Pretend that the sky is the limit.

"After four folds, (that sheet of paper) will be as thick as a credit card. If it could be folded 11 times, it would be as tall as a can of Diet Coke. After 10 more folds, it would be taller than Big Ben," the Susskinds write. "After a further 10 folds, it would reach outer space. After 12 more folds, it would reach the moon. And if you could fold this single piece of paper 100 times, it would create a wad over 8 billion light years in thickness."

In fact, other experts estimate that if you could fold that sheet of paper just three more times — 103 folds in all —

"In the next five years," says world-renowned futurist Daniel Burrus, "game-changing technologies will transform every business process..."

you would end up with a wad of paper as wide as the entire known universe.

That's not linear change; it's exponential. It's gradual, then shockingly sudden.

And it's not theoretical. A perfect example of exponential change is impacting every corner of our world as we speak.

It's called Moore's Law.

Developed in 1965 by Gordon Moore (who would go on to co-found Intel just three years later), Moore's Law, in its simplest form, predicted that the number of transistors that could be placed in an integrated circuit would double every 18 to 24 months. In essence, Moore predicted that the processing power of computers would double every two years or so.

That law has held true to this very day, and it has given us some unbelievable advances in technology along the way. In *Thank You For Being Late: An Optimist's Guide to Thriving in the Age of Accelerations*, Thomas Friedman writes that Intel engineers recently tried to illustrate the power of Moore's Law by calculating what would happen to a 1971 Volkswagen Beetle if it had improved at the same rate as microchips have over the past 50 years.

"Today," Friedman writes, "that Beetle would be able to go about 300,000 miles per hour. It would get 2 million miles per gallon of gas, and it would cost 4 cents."

Intel's engineers took it a step further, Friedman writes, and "estimated that if automobile fuel efficiency improved at the same rate as Moore's Law, you could, roughly speaking, drive a car your whole life on one tank of gasoline."

Thanks to Moore's Law, our smartphones are more powerful than the Apollo guidance computers that took men to the moon. Our tablets now outperform the world's most powerful supercomputers just 30 years ago. The cost of sequencing one person's genome has plummeted from \$100 million in 2001 to just \$1,000 today. In essence, each one of us is carrying a mainframe around in our pockets.

But Moore's Law is giving us more than a bunch of shiny new gadgets to play with. It is fundamentally changing every job on the planet — and finance and accounting professionals are right at the top of the list.

Advances like cloud computing, blockchain technology, and artificial intelligence are joining forces to reshape the profession. In fact, says Barry Melancon, it's already happening.

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**Accounting and
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*The source of most of that
tension isn't the job; it's the
outside disruptions that are
impacting their work.*

“We won’t recognize the vast majority of CPA firms in five or 10 years,” Melancon, president and CEO of the American Institute of CPAs, said at a recent gathering of accounting technology vendors. “If all other businesses are going through major changes, who are we to think CPA firms won’t have to as well?”

Exponential change is gradual, then shockingly sudden.

CPA firms aren’t the only ones feeling the heat. According to the Hackett Group, the number of full-time accounting and finance employees at large companies has fallen from 119 people for every \$1 billion in revenue in 2004 to 71 people today. That’s a drop of 40 percent.

“In fact,” reports *The Economist*, “as a survey of business leaders in the U.S. and western Europe reveals, finance executives are especially eager to automate. It found that 62 percent of finance executives plan to launch or oversee an initiative to increase automation in their department in the next two years. No other function included in the study is more consistent in its intentions.”

THE AGE OF THE FUTURE-READY FINANCE TEAM

Changing the profession, though, starts with changing ourselves — and that is often easier said than done.

The reason is simple: Accounting and finance professionals are busy — busier, in fact, than they’ve ever been. The source of most of that tension isn’t the job; it’s the outside disruptions that are impacting their work.

Maryland Association of CPAs Executive Director Tom Hood holds a series of town hall-style professional issues updates for members twice each year. At each meeting, he asks members a simple question: “What’s keeping you up at night?” The most recent results are eye-opening. The things accounting and finance professionals are most worried about these days are:

1. Keeping up
2. Information overload
3. Doing more with less
4. Being proactive vs. reactive
5. Complexity

There’s not a technical issue to be found here. These responses all have to do with disruption — new stuff, new technologies, regulations, demographic shifts, global and economic issues. They’re all ganging up on us ... and they’re making our lives extremely complex at the same time.

Addressing these issues means moving beyond our busy-ness and learning how to become more

“future-ready” — a state that CPA.com defines as “the capacity to be aware, predictive, and adaptive of emerging challenges, technological innovations, and trends and changes in business, population, and the social environment.”

Therein lies the problem. A 2015 CPA.com study found that only 8 percent of CPAs nationwide believe the profession is future-ready today.

Yet that’s exactly where our clients want us to be. A 2014 report from The Sleeter Group found that the most often-cited reason why small and mid-size businesses leave their CPA firms is because those firms provide reactive advice instead of proactive services. In essence, clients say they leave because their CPAs aren’t future-ready enough.

Our predicament is that we’re too busy to become future-ready, and our clients are leaving because we’re not future-ready.

The key, it seems, is to move beyond accounting and finance. CPAs must start moving beyond the historical data that has traditionally driven this profession and start helping clients identify the weak signals of disruptive change before they start disrupting us. Doing that means learning to become future-ready ourselves.

And there’s our predicament: We’re too busy to become future-ready, and our clients and customers are leaving because we’re *not* future-ready.

Busy-ness, though, is just an excuse.

“We’re so busy doing our jobs, we can’t get any work done,” says best-selling author and entrepreneur Seth Godin. “When the job is in the way of the work, consider changing your job enough so that you can go back to creating value. Anything less is hiding.”

The so-called lack of time that we all hide behind is an excuse for not doing the important work of becoming future-ready, Godin says. The fact is, we *make* time for the important stuff. And these days, there may nothing as important as becoming future-ready.

Disruption will continue to happen whether we like it or not, and our lives will continue to become more complex as a result. We can't do anything about that.

What we can do is learn how to spot those disruptions before they disrupt us and take advantage of the opportunities they provide — and then teach our clients how to do so as well.

There are five specific steps for doing so — five keys that every accounting and finance professional needs in order to become future-ready.

1. Context
2. Certainty
3. Capacity
4. Competence
5. Core values

Let's examine each of them in depth.

Step 1: Context

Context is simply the art of being aware of what's going on around you.

The taxi cab industry failed to do this. Today, there are more Uber cars than taxis on the streets of New York City.

The hotel industry failed to do this. It took Marriott and Hilton a combined 100 years to reach 1 million rooms under their management. AirBNB did it in just six years ... and without owning any real estate.

Some of our oldest, most grounded industries are being disrupted by forces from the outside. Will the accounting and finance profession be next?

Some would argue that it's already happening.

HERE COME THE MACHINES

In a paper titled "The Future of Employment: How Susceptible are Jobs to Computerisation?" University of Oxford researchers Carl Benedikt Frey and Michael Osborne tried to gauge the odds that certain occupations will be completely automated within the next 20 years. Among their predictions:

- Tax work: 98.7 percent
- Bookkeepers: 97.6 percent
- Accounting and auditing: 93.5 percent

In fact, only seven occupations — cargo and freight agents, watch repairers, insurance underwriters, mathematical technicians, hand sewers, title examiners, and telemarketers — fared worse in the study than tax professionals.

"The researchers admit that these estimates are rough and likely to be wrong," writes National Public Radio's Quoc Trung Bui. "But consider this a snapshot of what some smart people think the future might look like. If it says your job will likely be replaced by a machine, you've been warned."

Other studies offer similar predictions.

Art Bilger, a venture capitalist and expert at the Wharton School of Business, says 47 percent of the jobs in all developed nations will disappear in the next 25 years — that’s blue-collar and white-collar jobs. Moreover, says *The Economist*, “no government is prepared” for that level of job loss.

Other studies aren’t quite that alarmist. James Manyika, director of the McKinsey Global Institute, says “more jobs will change than will be automated away in the short to medium term.” Still, that change will be extreme. While only 5 percent of jobs can be completely automated over the next 10 years using current technologies, Manyika says at least 30 percent of the activities in 60 percent of all occupations can be automated over the next decade, from welders to gardeners to CEOs.

One way or another — complete automation or partial — our jobs are about to change. This type of disruption is coming. In one notable example, in fact, it has already arrived.

From health care and education to law and finance to food preparation and satellite imagery, Watson is redefining how work gets done in stunning ways.

THE WATSON EFFECT

Perhaps the biggest disruption bearing down on the accounting and finance profession is coming from IBM Watson, a cognitive learning system that is capable of answering questions asked in natural language. From health care and education to law and finance to food preparation and satellite imagery, Watson is redefining how work gets done in stunning ways.

Watson’s origin story begins in 1997, when an IBM computer called “Deep Blue” defeated grandmaster Garry Kasparov in chess. Seeking a new challenge, IBM researchers in 2004 began a quest to develop a machine that could defeat humans at the game show *Jeopardy!*, and Watson was born. By 2010, Watson was defeating humans at *Jeopardy!* on a regular basis, and a year later the machine defeated *Jeopardy!* world record-holder Ken Jennings.

And still few people paid attention.

Then Watson began doing some rather remarkable things:

- Its first commercial application, in 2013, was for management decisions related to lung cancer treatment at Memorial Sloan Kettering Cancer Center in New York City, in conjunction with health insurance company WellPoint.
- In August 2016, IBM began using Watson to analyze data from more than 200,000 Weather Underground weather stations. The ultimate goal is to use Watson to forecast the weather.
- BakerHostetler, one of the country's biggest law firms, has employed a Watson-powered robot called ROSS to conduct legal research. Billed as "the world's first artificially intelligent attorney," the machine "will be responsible for sifting through thousands of legal documents to bolster the firm's cases," *The Washington Post* reports. "These legal researcher jobs are typically filled by fresh-out-of-school lawyers early on in their careers."

What does Watson mean for accounting and finance professionals?

- Watson is even trying its hand in music. Grammy Award-winning producer Alex Da Kid collaborated with Watson last year to produce a "cognitive song" called "Not Easy." The song debuted at No. 6 on the Rock Digital Song Sales chart for Nov. 6, 2016.

Interesting stuff, but what does Watson mean for accounting and finance professionals?

Here's what:

- In March 2016, KPMG announced plans to apply the Watson technology to the firm's professional services offerings, including audit, tax, and advisory services.
- In February 2017, H&R Block announced it will be using Watson to help prepare tax returns at 10,000 of its offices nationwide.

This stuff isn't science fiction anymore. It's here, and it's impacting our profession as we speak.

How will CPAs react? Will they scramble to keep up, as usual? Or will they work to position themselves to move beyond that disruption and create future-focused value for their clients and customers?

This is what context is all about: seeing what's happening outside of our profession and understanding how it will impact those of us on the inside. The key is picking our heads up, putting away our busy work for a time, and doing the hard work of spotting future disruptions before they disrupt us.

Doing so is the first step toward future-readiness.

Step 2: Certainty

Can you predict the future?

Let's give it a try: What day comes after Tuesday? Will the sun rise in the east tomorrow? What holiday will fall on the fourth Thursday in November?

See? You *can* predict the future.

These are silly examples, to be sure, but the fact remains: We can predict certain things about the future with absolute accuracy. When we start basing our strategies and opportunities on certainties, two things happen:

- Our odds of success skyrocket.
- Our risk of failure plummets.

The key, of course, is figuring out which certainties will have the greatest impact on our firms and our clients.

The impact of some certainties will be minimal. The iPhone 7, for instance, will undoubtedly be followed by a more powerful model that will allow us to do more things and be measurably more productive. How can we use those advances to our advantage?

The impact of other certainties will be enormous.

Daniel Burrus, a futurist and author of the *New York Times* best-seller *Flash Foresight: How to See the Invisible and Do the Impossible*, says there are three "hard trends" — things that we know will happen — that are driving change in the accounting and finance world today:

- **Government regulation:** As disruptions mount, regulators and legislators ramp up efforts to keep them in check. Considering the fact that we're seeing more disruptions than ever, it stands to reason that we'll continue to see more game-changing regulations and legislation than ever. From Sarbanes-Oxley to Dodd-Frank to the Affordable Care Act, the last 15 years have given this profession some of the most groundbreaking

regulations in its history. Now, a new administration is promising to roll back many of those regulations and replace them with something new. The hard trends in this area undoubtedly will continue for the foreseeable future.

- **Technology:** No one is sure what tomorrow's technological advances will enable us to do, but this much is certain: Given the exponential march of Moore's Law, almost anything will be possible. Our explorations of what the future holds must start with that fact.
- **Demographics:** With nearly 10,000 baby boomers retiring each day, CPA firms everywhere are searching desperately for Gen X managers to step in and fill that leadership gap. They're not going to find them. There simply aren't enough Gen Xers available to do the job. That's a hard trend — we can't do anything about it. What we *can* do is look for alternative ways to fill the gap. Should we hire away leaders from our competition? Should we ramp up the leadership skills of our high-potential millennials? Should we insist that Generation Z newcomers are taught some basic leadership skills in college? We have a number of opportunities at our fingertips. What we *can't* do is hope the problem will go away. It won't.

Many leaders look at these certainties and see problems. The fact is, each comes with its own set of opportunities. If we can start basing our strategies on these certainties, we'll increase our chances of success, lower our risk of failure, and create our next competitive advantages over our competition — and we'll do it all *before* those trends arrive.

INACTION CAN BE FATAL

Here's one more fact about certainty to consider: Our inability to act on it is costing us real money. Harvard Business School professor Clayton Christensen says as much in an article he co-authored titled "Innovation killers: How financial tools destroy your capacity to do new things."

"When evaluating a future course of action, the argument goes, managers should consider only the future or marginal cash outlays (either capital or expense) that are required for an innovation investment, subtract those outlays from the marginal cash that is likely to flow in, and discount the resulting net flow to the present," Christensen writes. "... (T) here is nothing wrong with the mathematics of this principle, as long as the capabilities required for yesterday's success are adequate for tomorrow's as well. When new capabilities are required for future success, however, this margining on fixed and sunk costs biases managers toward leveraging assets and capabilities that are likely to become obsolete."

Here's one more fact about certainty to consider: Our inability to act on it is costing us real money.

In layman's terms, here's what Christensen says: In times of relative stability, the cost of not innovating — of doing nothing, in other words — is close to zero. Inaction won't make us any money, but it won't cost us anything, either.

But in times of great change and complexity — like today, in other words — doing nothing means we're falling further and further behind. You might choose to ignore things like social business, the cloud, and artificial intelligence, but your competitors are not.

By choosing not to act, you might as well be choosing to go extinct.



Step 3: Capacity

Capacity is the ability to create time to do the important work of becoming future-ready. If our biggest challenge is a lack of time, our biggest opportunity is to find the excess capacity that will allow us to do this crucial work.

Doing so is an extremely personal endeavor. Only we can honestly assess whether we are spending our time wisely or not. Finding capacity means being brutally honest with ourselves and eliminating activities that don't improve our future-readiness. As we said earlier, we make time for the things that are truly important to us. More than anything else, creating capacity is an exercise in prioritization.

That said, there are some things *all* of us can do to milk a bit more capacity out of our days.

- **Maximize software and technology tools:** The latest version of Microsoft Word has thousands of features and functions. How many do you use regularly? Ten? Maybe 20, tops? Now ask yourself: How many of those features did you pay for? And this is but one example from the scores of pieces of software that we use on a daily basis.

The tools we use daily are built to save us time and help us work smarter, not harder. Our opportunity is to find and learn these time-saving features and apply the time we save to more value-added activities.

- **Use the latest, most efficient technologies:** Are there apps available that will save you time by doing things that you're now doing by hand? Ask your young professionals about their favorite productivity apps, then ask them to show you how to use those apps. Buy an Amazon Echo and learn how it might help you save some time. Constantly ask yourself: "Is there a more efficient way to do this?"
- **Focus on your "A" clients:** Those D clients suck a lot of time and energy out of your firm, don't they? Remember the 80-20 rule: Twenty percent of your clients account for 80 percent of your revenue. How can you free up capacity to better serve your A clients

with more proactive services? Does doing so mean that you have to fire some of your D clients? These are some of the crucial conversations you'll need to have in order to become more future-ready.

- **Engage your people:** According to Gallup, almost 70 percent of your workforce is disengaged. That means they're just punching the clock without giving you any discretionary effort. Of that 70 percent, 30 percent are what Gallup calls "actively disengaged." According to Gallup, these employees are "unhappy and unproductive at work and liable to spread negativity to coworkers."

Most organizations see these disengaged employees as a burden. "If they're so miserable," many leaders say, "why don't they just leave?"

These leaders fail to see the huge opportunity embedded within these numbers: What if we could actually engage these disengaged employees? Imagine the additional capacity they could create within our organizations.

Employee engagement is about co-creation and collaboration. It's about getting your employees involved in the future of your firm. Get them involved in fixing the workflow, for instance, or in figuring out how you can save time or create a flexible workplace. Then try the things they suggest. If those things don't work, adjust ... and try some more things ... and adjust again. Make them feel as if they are contributing — as if they are part of the solution. Do that and you will get their heads *and* their hearts, and they will work a lot harder for you. Imagine the capacity you'll create — and the problems you'll solve — once you do.

The extra time you create via these capacity-building exercises can be used to do the important work of becoming future-ready. Doing that often starts with learning the skills that future-readiness requires — skills that traditional accounting and finance professionals too often lack, and that their organizations are often reluctant to provide for them.

Let's take a closer look at the competencies tomorrow's accounting and finance professionals will need to succeed going forward.

Employee engagement is about co-creation and collaboration.

Step 4: Competencies

As automation, machine learning, and artificial intelligence make inroads into their profession, many accounting and finance experts are understandably concerned. Do these new technologies mean that their profession is dying?

Not at all.

Much of that automated work centers on the core, transactional tasks that so much of the profession has been built on for generations — the jobs responsible for accountants' reputation as number-crunchers.

Humans can't compete with machines for those jobs. Nor should they try. Machines can do those jobs faster and more accurately than humans can ever hope to, and thanks to Moore's Law, they'll only get faster and more accurate as time goes on.

Believe it or not, that's good news. Remember The Sleeter Group's research? Your clients don't want you to crunch the numbers. They want you to provide them with proactive advice. They want you to tell the story behind those numbers and help them grow their businesses.

In short, they want you to help them become future-ready — and for the time being, that's something the machines *can't* do.

Sure, today's machines are lightning fast, have encyclopaedic memories, continually learn and improve, analyze data on the fly, and never sleep — they do these things 24 hours a day, seven days a week, 365 days a year.

But they can't do everything. They are, after all, machines, and according to Deloitte CEO Cathy Englebert, that means they have some significant shortcomings — and that presents some huge opportunities for us humans.

"I still believe professional judgment and expertise are not replaceable by machines," Englebert told *Accounting Today*. "I've never met a machine with courage and empathy, one that can read body language and adjust what they say. While we're going to digest larger volumes of data and information, the key is to use artificial intelligence to augment what the human does. ... Using these technologies to augment human intelligence and find the insights in the data is more

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important than ever.”

PwC executives Bill Brennan, Mike Baccala and Mike Flynn agree.

“Clients retain auditors for the assurance they provide over the financials, and that can only come through thoughtful examination and the exercise of judgment — human judgment,” they wrote for CFO.com. “A.I. systems can assist the auditors by acquiring, processing, and churning through the mountains of data that a business’s financial reporting systems generate. But while the machines may more quickly and completely identify patterns and anomalies in massive data sets, more value comes from investigating and deducing the reasons behind the pattern or the anomaly. Only human beings, such as the auditor, can tell the true story behind the data.”

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As proof, let’s take another look at what IBM’s Watson is doing. In *Thank You for Being Late*, Thomas Friedman focuses on Watson’s impact on health care:

“Today’s Watson is now busy ingesting all known medical research on subjects such as cancer diagnostics and treatments,” Friedman writes. “... By June 2016, Watson was already being used by 15 of the world’s leading cancer institutes, had ingested more than 12 million pages of medical articles, 300 medical journals, 200 textbooks, and tens of millions of patient records, and that number is increasing every day. The idea is not to prove that Watson would ever replace doctors, said (John E.) Kelly (IBM’s senior vice president of cognitive solutions and IBM research), but to prove what an incredible aid it can be to doctors, who have long been challenged to keep current with medical literature and new findings.”

Sound familiar, accounting and finance professionals? Friedman continues:

“Today, IBM will feed a medical Watson 3,000 images, 200 of which are of melanomas and 2,800 are not, and Watson then uses its algorithm to start to learn that the melanomas have these colors, topographies, and edges. And after looking at tens of thousands and understanding the features they have in common, it can, much quicker than a human, identify particularly cancerous ones. That capability frees up doctors to focus where they are most needed — the patient.”

For our purposes, in the final sentence above, we can easily replace “doctors” with “accounting and finance professionals” and “patient” with “customer.”

“In other words,” writes Friedman, “the magic of Watson happens when it is combined with the unique capabilities of a human doctor — such as intuition, empathy, and judgment. The synthesis of the two can lead to the creation and application of knowledge that is far superior to anything either could do on their own.”

NEW SKILLS FOR A NEW ERA IN ACCOUNTING

To cultivate those unique capabilities, though — to become more intuitive, empathetic, and insightful — accounting and finance professionals must learn a new set of skills that are defined less by data and more by relationships.

Study after study reveals the exact nature of those skills.

Research by Development Dimensions International, the Conference Board, the American Institute of CPAs, CPA.com, CGMA, and the Business Learning Institute all point to the same conclusion: The top skills accounting and finance professionals will need to succeed going forward have very little to do with the transactional core that has defined this profession for generations. These new skills include:

- Strategic and critical thinking
- Change management
- Communication
- Inspiring and motivating others
- Collaboration and mobilizing consensus
- Decisiveness in times of ambiguity
- Influencing and persuading others
- Innovation

“[Anticipation is] the ability to anticipate disruptions before they disrupt you...”

—*Daniel Burrus*

And yet, if you were to ask finance departments how much they are investing in teaching these competencies to their teams, the answer would likely be, “Very little.” Accounting and finance professionals say they need them, the research says they need them, clients and customers say they need them ... but relatively few organizations are spending the money to make sure their people acquire these needed skills. That has to change.

ANTICIPATION: THE KEY MISSING COMPETENCY

Of all the skills accounting and finance professionals will need to succeed going forward, one stands apart from all others.

It’s anticipation.

Futurist Daniel Burrus defines it as “the ability to anticipate disruptions before they disrupt you, problems before you have them, customer needs before they have them, and new opportunities before the competition spots them.”

Anticipation is the ability to identify future trends before they arrive and position our organizations to take advantage of those trends before our competition does. It’s so important, in fact, that Burrus calls it the greatest missing competency in business today.

And it’s a skill we all can learn.

TEACHING THE SKILL OF ANTICIPATION

The Business Learning Institute has partnered with Burrus to produce “The Anticipatory Organization™: Accounting and Finance Edition.” This groundbreaking new learning program is designed to help accounting and finance professionals jump-start their ability to anticipate future trends and take advantage of the opportunities those trends offer.

It goes even further, though. Through the use of job aids and rapid application tools, The Anticipatory Organization teaches professionals to apply what they’ve learned directly to their own jobs and immediately put those lessons to work.

Anticipation is the ability to identify future trends before they arrive and position our organizations to take advantage of those trends before our competition does.

The Anticipatory Organization’s theories are being put into practice by accounting and

finance professionals with a wide range of business and industry experience, with remarkable results.

“It has re-energized our company,” said Anoop Mehta, CPA, CGMA, president of Science Systems and Applications, Inc., a Lanham, Md.-based provider of scientific research and development, engineering, and information analytics services for Earth and space science disciplines. “Involving our employees at all levels in this training has increased their ability to distinguish hard and soft trends and helped them understand how those trends can contribute to our customers’ success, and to their own success as well.”

“It’s an increasingly vital skillset to have, because the things we thought we knew and understood will likely change in the very near future.”

Mehta, a board member with the Association of International Certified Professional Accountants, said SSAI’s employees are proposing new ideas for diversifying the company’s portfolio based on the hard and soft trends they identified during The Anticipatory Organization program. Those ideas often center on areas the company’s leaders had not previously considered.

“As we continually experience technological, geopolitical, and other disruptions, it is important to be able to anticipate and understand those disruptions to be better prepared,” Mehta said. “It’s an increasingly vital skillset to have, because the things we thought we knew and understood will likely change in the very near future.”

“Whatever initiatives you are implementing in your organization, knowing and understanding these techniques will help you do those things even better,” he added.

Ken Kelly agreed.

“It’s a mindset change for the future of finance and accounting,” said Kelly, a former senior vice president and controller with spice giant McCormick and current president of business and finance consulting firm KK Advisory. “Shared services, robotics, big data, artificial intelligence — all of these innovations are eating away at accounting’s role in ‘crunching the numbers.’ Transaction processing is taking less human time as it becomes more streamlined and automated. The role of accounting and finance is moving up the value chain. We are spending less time crunching of data and more time interpreting that data. In that way, The Anticipatory Organization is giving

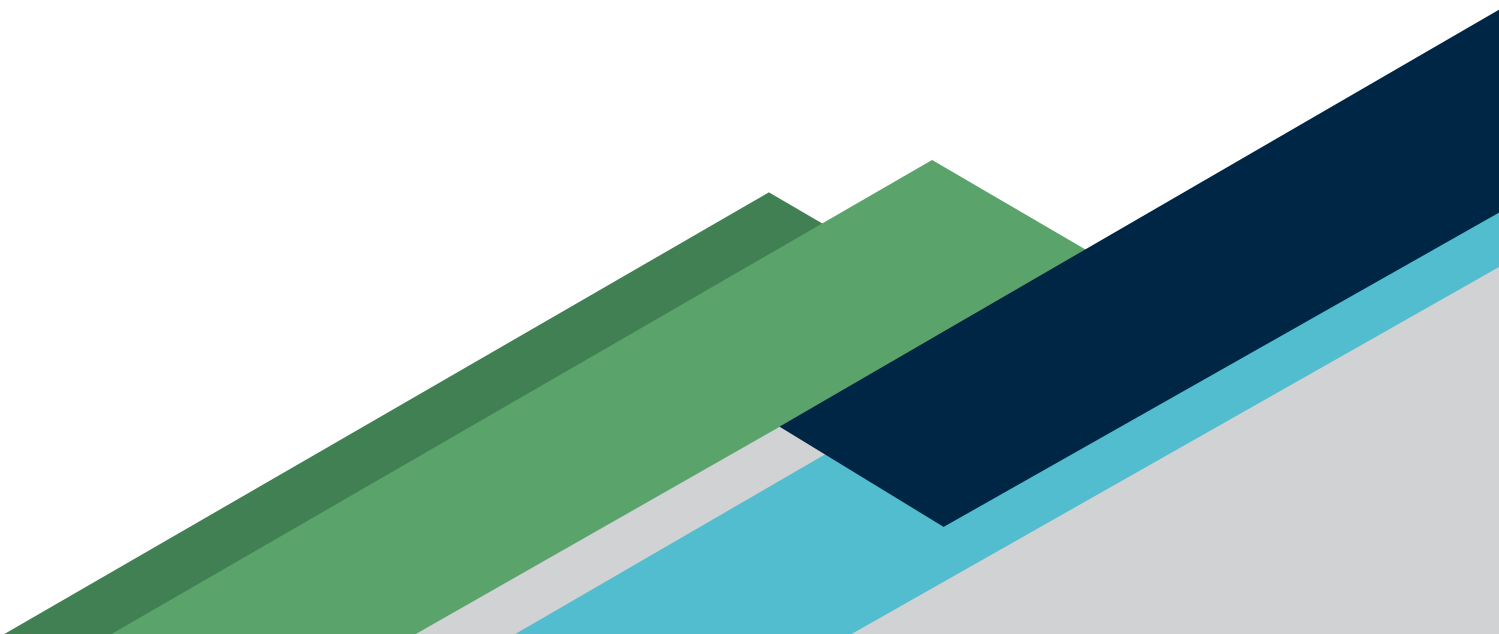
accounting and finance professionals the mindset and tools that will lead us on that journey.

“Accounting is the language of business,” he added, “and we are the translators of that language.”

“It’s a mindset change for the future of finance and accounting.”

Kelly believes the ability to anticipate future trends and position our organizations to take advantage of them will help finance professionals add more value to their organizations and customers, not less, in the age of automation.

“I have heard some people say they believe the accounting profession will not be needed in the future. I don’t agree,” he said. “I believe the accounting and finance profession is more critical today than it has ever been. We just need to change and adapt so that we become the ones who interpret, give insight, and use data to shape decision-making and direction in our corporations. That skill will make accounting and finance an invaluable resource.”



Step 5: Core purpose and values

As much as everything seems to be changing these days, it's nice to know there are some things that should *never* change. For accounting and finance professionals, those things are our core purpose and values.

These foundational beliefs were developed in 2011 as part of the American Institute of CPAs' Horizons 2025 Project. A futurist and facilitators from the Maryland Association of CPAs and the Business Learning Institute led more than 1,000 finance professionals from coast to coast in an exercise to determine the profession's future. As part of that project, this grassroots collection of accounting and finance professionals identified the profession's core purpose:

CPAs: Making sense of a changing and complex world.

The core values that serve as the foundation of that purpose are:

- Trust
- Integrity
- Objectivity
- Excellence
- Lifelong learning

In an era of great change and complexity, these values are our constants. Business expert and best-selling author Jim Collins argues that protecting our core is a key part of stimulating progress. Sometimes, says Collins, we have to change what we do in order to remain who we are — and who we are should never change.

That's more than an inspirational slogan. Core purposes and values have a real impact on our bottom line. According to Collins, organizations that align their strategies with

core purposes and values outperform their industry average by nearly 1,500 percent.

Core purposes and values are also key weapons in the war for talent. Study after study indicate that more than almost anything, young professionals want to work for organizations that have a clearly defined purpose, one that is about effecting real change in the world and not merely making money. Organizations that have spent time developing a compelling core purpose and aligning their teams to that purpose have a clear advantage when it comes to recruiting and retaining the brightest available talent.

Protecting our core is a key part of stimulating progress.

For a slightly different perspective, let's turn to Dan Pink. A best-selling author and expert in business and behavioral science, Pink says motivation among employees is driven by three things:

- **Autonomy:** People want real control over various aspects of their work. Self-direction is a key to meaningful engagement.
- **Mastery:** Give your employees room to grow. Give them stretch assignments that will push them a bit out of their comfort zone and let them master those, then push them some more. The idea is to foster improvement, continual mastery, and growth.
- **Purpose:** According to Pink, connecting to a cause that's larger than yourself drives the deepest motivation and engagement. Does your organization's purpose motivate people in that way?

Our core values and purposes are the fuels on which our organizations run, but they are much more than that. They fuel our recruitment and retention efforts, drive employee engagement, and provide a significant boost to the bottom line — and they should never, ever change.

In an era of unprecedented change and complexity, that's a comforting thought.

The journey toward future-readiness starts here

Here's the bottom line: Becoming future-ready isn't a nebulous, unattainable concept. It's a skill we can learn. Given the fact that our clients, customers, and employers want us to be future-ready, it might be one of the most important skills we'll need going forward.

But it's no easy task. Given how busy we are these days, it will require us to make some hard choices about how we spend our time. It's true that we make time for the things we consider to be really important — and fitting those things into our packed schedules means that we have to stop doing something else.

Becoming future-ready is a skill we can learn.

The first step isn't complex, though. It requires nothing more than a new entry in our calendars.

"My calendar," says futurist Daniel Burrus, "is the most important app on my phone. If it's not in my calendar, it won't get done." That's probably true for most of us.

With that in mind, your journey to future-readiness should start with a simple, one-hour appointment with yourself. Block off one hour within the next week on your calendar, and commit yourself to spending that hour becoming just a bit more future-ready.

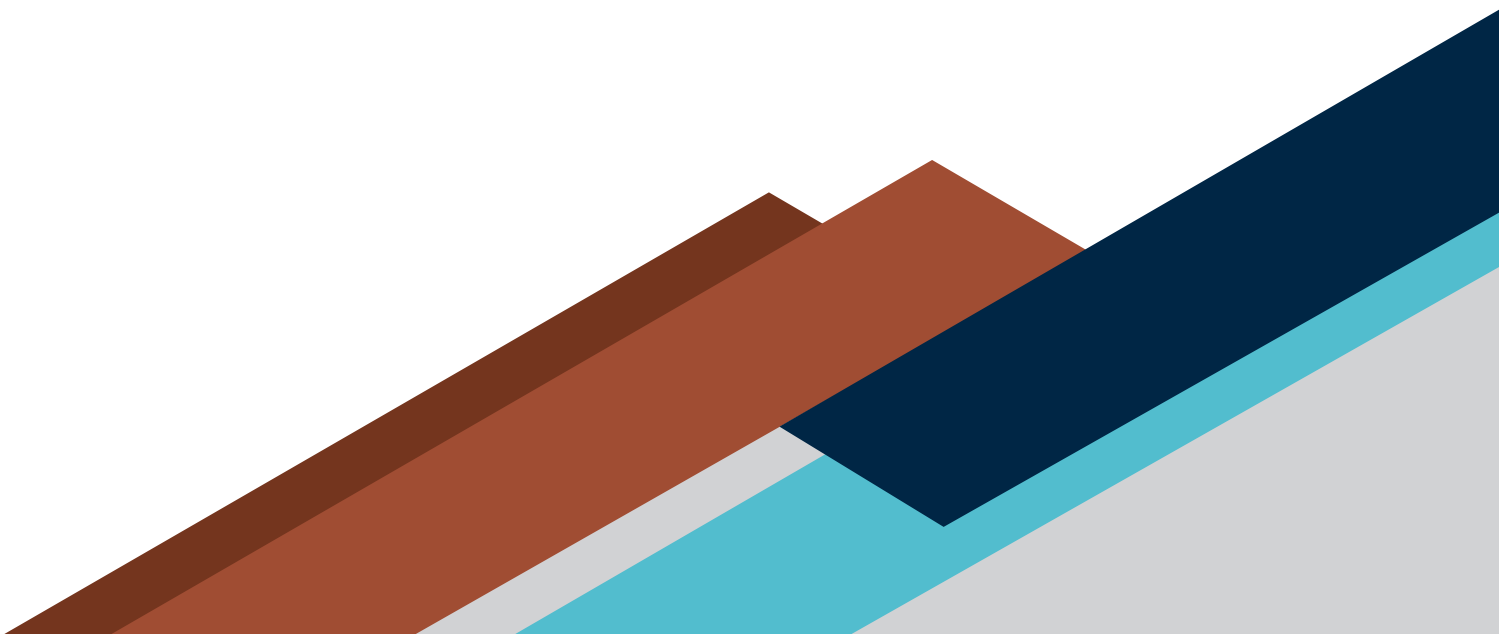
- Scan the business and technology press for clues about hard trends that will soon impact you and your clients.
- Read a book or article about the future. Some suggested reading is included in the "Resources" section of this whitepaper below.
- Download a new productivity app and learn to use it, or figure out how to better understand a technology that you already have.
- Think about how the accounting and finance profession is changing and what those changes mean for you and your organization.

Next, make that one-hour appointment a recurring appointment, and commit yourself to spending just one hour each week doing this type of critical work.

The future can belong to you, but only if you choose to take it. As R. Buckminster Fuller once said, "We are called to be architects of the future, not its victims."

***Put another way by Abraham Lincoln:
"The best way to predict your future is
to create it."***

Let's get started.



**“The best way
to predict your
future is to
create it.”**

– Abraham Lincoln

Resources

“25 game-changing trends that will create disruption and opportunity,” by Daniel Burrus
<http://www.burrus.com/2013/12/game-changing-it-trends-a-five-year-outlook-part-i/>

“47 percent of jobs will disappear in the next 25 years, according to Oxford University,” by Philip Perry (BigThink)
<http://bigthink.com/philip-perry/47-of-jobs-in-the-next-25-years-will-disappear-according-to-oxford-university>

“Aligning action and values,” by Jim Collins
http://www.jimcollins.com/article_topics/articles/aligning-action.html

The Anticipatory Organization: Accounting and Finance Edition (Business Learning Institute)
<http://blionline.org/the-anticipatory-organization/>

Business Learning Institute: Course catalog
<http://blionline.org/services/course-catalog/>

CGMA Competency Framework
<https://www.cgma.org/Resources/Tools/DownloadableDocuments/competency-framework-overview.pdf>

CPA Horizons 2025 Project (American Institute of CPAs)
<http://www.aicpa.org/research/cpahorizons2025/Pages/CPAHorizons2025.aspx>

“Deloitte leverages AI and analytics for audits,” by Michael Cohn (Accounting Today)
<http://www.accountingtoday.com/news/deloitte-leverages-ai-and-analytics-for-audits>

***Drive: The Surprising Truth About What Motivates Us*, by Dan Pink**
<http://www.danpink.com/books/drive/>

***Flash Foresight: How to See the Invisible and Do the Impossible*, by Daniel Burrus**
<http://www.burrus.com/store/flash-foresight-book/>

***The Fourth Industrial Revolution*, by Klaus Schwab**
<https://www.weforum.org/agenda/2016/01/the-fourth-industrial-revolution-what-it-means-and-how-to-respond/>

"The future: 'If it is to be, it is up to me,'" by Bill Sheridan (Business Learning Institute)

<http://blionline.org/2015/05/the-future-if-it-is-to-be-its-up-to-me/>

"The Future of Employment: How Susceptible are Jobs to Computerisation?" by Carl Benedikt Frey and Michael A. Osborne (Oxford University)

www.oxfordmartin.ox.ac.uk/downloads/academic/The_Future_of_Employment.pdf

***The Future of the Professions: How Technology Will Transform the Work of Human Experts,* by Richard and Daniel Susskind**

<https://www.amazon.com/Future-Professions-Technology-Transform-Experts/dp/0198713398>

"IBM gives Watson a new challenge: Your tax return," by Steve Lohr (*The New York Times*)

<https://www.nytimes.com/2017/02/01/technology/ibm-watson-tax-return.html>

"Innovation killers: How financial tools destroy your capacity to do new things," by Clayton M. Christensen, Stephen P. Kaufman, and Willy C. Shih (*Harvard Business Review*)

<https://hbr.org/2008/01/innovation-killers-how-financial-tools-destroy-your-capacity-to-do-new-things>

"Meet ROSS, the newly hired legal robot," by Karen Turner (*The Washington Post*)

<https://www.washingtonpost.com/news/innovations/wp/2016/05/16/meet-ross-the-newly-hired-legal-robot/>

"Melancon: CPA firms will be unrecognizable in 5-10 years," by Daniel Hood (*Accounting Today*)

<http://www.accountingtoday.com/news/melancon-cpa-firms-will-be-unrecognizable-in-5-10-years>

"Why the future of finance is (still) automation" (*The Economist*)

<http://transformingbusiness.economist.com/future-finance-still-automation/>

"Moore's Law," from Wikipedia

https://en.wikipedia.org/wiki/Moore's_law

Ready-Now Leaders: 25 Findings to Meet Tomorrow's Business Challenges (Development Dimensions International)

http://www.ddiworld.com/ddi/media/trend-research/global-leadership-forecast-2014-2015_tr_ddi.pdf?ext=.pdf

"So busy doing my job, I can't get any work done," by Seth Godin

http://sethgodin.typepad.com/seths_blog/2016/06/so-busy-doing-my-job-i-cant-get-any-work-done.html

***Thank You for Being Late: An Optimist's Guide to Thriving in the Age of Accelerations*, by Thomas L. Friedman**

<http://www.thomasfriedman.com/thank-you-for-being-late/>

"There are now more Uber cars than yellow taxis in NYC," by Jacob Pramuk (CNBC)

<http://www.cnbc.com/2015/03/18/there-are-now-more-uber-cars-than-yellow-taxis-in-nyc.html>

"Want to beat the machines? Learn to do what they can't do," by Bill Sheridan (Business Learning Institute)

<http://blionline.org/2017/01/want-beat-machines-learn-cant/>

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[https://en.wikipedia.org/wiki/Watson_\(computer\)](https://en.wikipedia.org/wiki/Watson_(computer))

***Welcome to the Fast Future: Insight into the CPA of the Future 2015 Study*, from CPA.com**

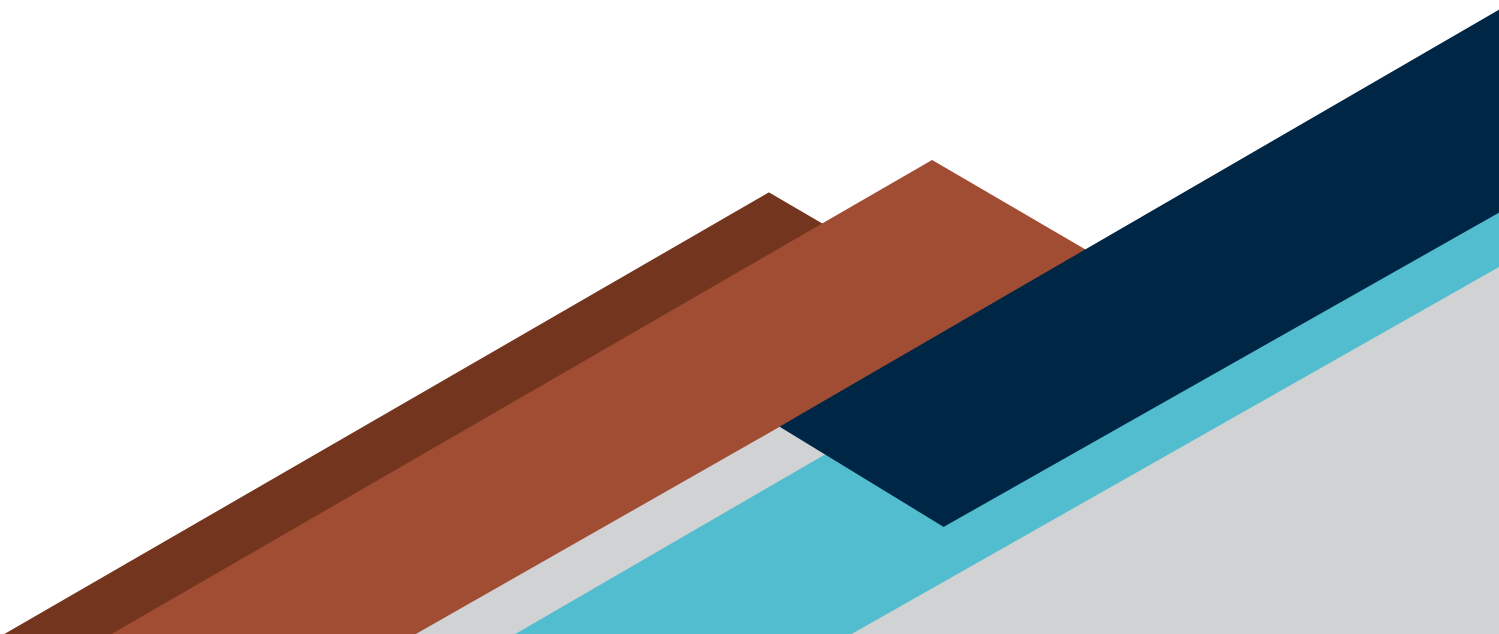
<http://www.cpa.com/whitepapers/welcome-fast-future-cpa-future-2015-study>

"Will your job be done by a machine?" by Quoctrung Bui (NPR)

<http://www.npr.org/sections/money/2015/05/21/408234543/will-your-job-be-done-by-a-machine>

"Workplace automation: Separating fact from fiction," by James Manyika (LinkedIn)

<https://www.linkedin.com/pulse/workplace-automation-separating-fiction-from-fact-james-manyika>



Human Work in the Age of Machines

**FIVE STEPS FOR
BUILDING A
FUTURE-READY
FINANCE TEAM**

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