

THE SOFTCHOICE INNOVATION REPORT 2018 FOUR NEW ROLES FOR CIOS IN THE MODERN BUSINESS

In 2017, Softchoice's Innovation Executive Forum traveled across North America, taking the pulse of today's front-line leaders of digital transformation. From St. John's to Los Angeles, we visited 14 major cities, and met with over 120 top-level technology executives to discuss their priorities, challenges, and experiences pushing forward change. Online, we hosted quarterly conference calls with members and special guests, and published numerous whitepapers featuring insights from organizations big and small.



In this report, we have condensed 12 months of insights, dialogue and reporting with our IEF community into a single, clear and compelling vision for the future of IT.

Our goal was to define how today's CIOs need to act and prepare for the year ahead. In the process, we unearthed multiple compelling ideas, which we were able to group into four distinct strategies. Think of them as profiles, or archetypes, of the kind of technology leader you need to be to tackle the challenges heading your way in 2018.

While each role is focused on different strategies and out-comes in the IT world, they all have one thing in common. No matter what kind of CIO you are, you need to be able to drive business value. As one IEF member put it at an event in 2017: "No matter what we do, it always comes back to the mantra 'Business value of IT.'"

FOUR NEW ROLES FOR CIOS IN THE MODERN BUSINESS

> THE TECHNOLOGY ORCHESTRATOR

Your business is taking part in a symphony of innovation. You are the conductor.

> THE PEOPLE'S CHAMPION

Technology doesn't change your business. People do.

> THE SECURITY MENTOR

The only thing to fear is fear, without action. Don't let that happen to your business.

> THE DATA WHISPERER

Data doesn't speak insights — unless you ask it to.



THE TECHNOLOGY ORCHESTRATOR

"If electricity runs through it, then you probably own it."

IEF Member, Colorado, USA

IT departments used to be seen as back-office maintenance workers, just "keeping the lights on." Not anymore. Today, our cloud-everywhere, mobile-first, digital world is putting technology in the driver's seat across industries. As one IEF member aptly put it: "We're all technology companies now, who just happen to be in the business of 'X'."

As a result, the expectations and pressures on IT are higher than ever. Users expect mobility, anytime access and unfettered experiences. Cloud and subscription services make it easy for anyone with a credit card to bring a new application (and a set of risks) into the organization. The rise of the platform economy, and the disruption goliaths such as Amazon and Google are changing the rules on how customers buy, every day. All of a sudden, every industry, no matter how old and successful, feels they are on the chopping block.

THE STRATEGIES

Amidst this chaos, IT leaders need to move beyond "just keeping the lights on" to become an orchestrator of digital innovation. To do so, modern CIOs are brokering, and mediating the delivery of new solutions, while guiding the business to develop new business models, close skills gaps and increase end-user adoption.

BRIDGING TECHNOLOGY AND THE BUSINESS

As a guest speaker said in one of our conference calls: "The CIO needs to be a bridge, connecting all the technologies, on premise, off premise, hybrid and security, to fully enable the business at all times." In other words, IT's job is no longer to just build and fix things that help the business run. They must assemble the jigsaw puzzle of in-house and cloud-delivered services and infrastructure. From picking the right cloud solution, to outsourcing support desk and manual repetitive tasks, IT is in the middle, ensuring each decision is optimized for the business, well governed and secure.

One IEF member pointed out that as IT evolves, it can't disregard its traditional "back office" duties in the process. IT must do both. "Thinking a digital officer will run transformation while IT will do the back-office stuff is dangerous. Not just for the business, but IT folks, too."

OPENING UP TO THE PLATFORM ECONOMY

Our IEF events featured stories of businesses such as restaurants losing control of their customer experience from hot new digital intermediaries such as UberEATS. Meanwhile, traditional industries are being pushed to compete in open online marketplaces to sell their services and products alongside competitors (think airlines, auto dealerships, even healthcare). Today's IT Leader is helping the business find its place in these open ecosystems, learning to embrace the new battleground, and leverage the right API's and third-party services. This is a far cry from traditional perspectives on controlling the entire user experience and building everything from scratch.

CLOSING SKILL GAPS IN THE GIG ECONOMY

Cloud offers businesses much value, but implementing it effectively demands scarce and expensive talent. Instead of spending time and money skilling up internal resources, or trying to attract specialized full time skills, modern IT leaders are leveraging more effective strategies. For example, IEF members are outsourcing key operational roles, and leveraging flexible "gig economy" part time resources, to fill gaps. "A big part of the strategy is: 'How do I get as much as possible outsourced?" said one IEF member. The reality is that many of these skills are not needed on a full time basis, so the "gig" approach aligns well with on-demand needs. Leaders are then able to source the skills they need on a project by project basis.

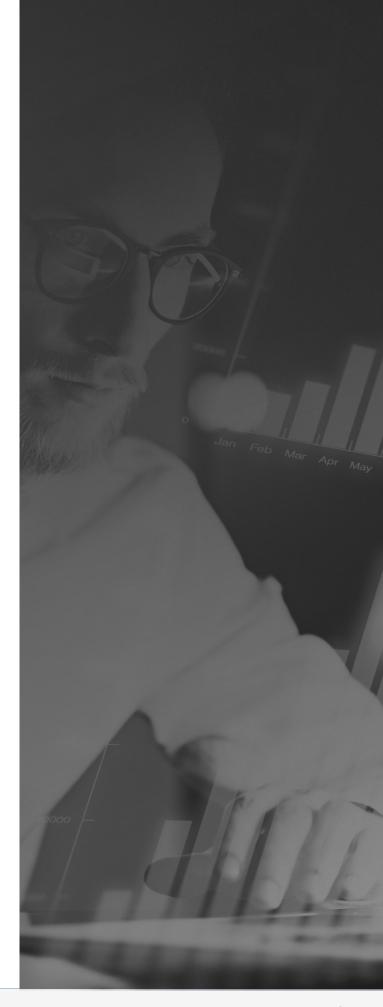


In one of our more recent IEF events, our members agreed that the time for "Cowboy IT" is over. CIOs must take the lead in finding strategic, effective approaches for straddling the wild west of digital disruption. Doing so has plenty of pay-off.

Technology Orchestrators ensure IT resources are focused on innovating what is core to the business, outsourcing everything they can that isn't. They also give businesses gov-erned, secure and effective access to economies of scale provided by cloud. It's no coincidence Hybrid IT is one of the fastest growing trends in 2018. Establishing a mix of on and off-premise workloads is one of the most lucrative, value-laden strategies a business can pursue. And doing so will only be possible with the help of a master orchestrator.

"Thinking a digital officer will run transformation while IT will do the back-office stuff is dangerous. Not just for the business, but IT folks, too."

Guest Speaker, IEF Conference Call





THE PEOPLE'S CHAMPION

"Why can I do so many things with my home technology, but when I come into the enterprise it has to be difficult? Are we not paying attention?"

Guest Speaker, IEF Conference Call

Something funny happened as the business world went more digital. It also became more human. Today, design thinking and "customer-centric" philosophies span industries, from heavy machine manufacturers, to automobile makers, to home insurance vendors. Meanwhile, digital natives have taken the workforce by storm. With them, an expectation for fluid, flexible and on-demand working conditions.

People are at the center of all technological innovation. For a profession traditionally light on soft skills, user-friendliness and the design-minded philosophies that have become so fundamental, today's IT needs to embrace its role as the People's Champion. Or else, their technology project risks failure from an adoption and usage standpoint.

"Throughout my career, I've been taught to put people first — and the profits and products will follow."

Guest Speaker, IEF Conference Call

THE STRATEGIES

From understanding customer and employee needs, to fostering more innovative ideas, IT has a crucial role to play in unleashing the potential of people power at every step of the digital transformation.

GIVING CUSTOMERS AND EMPLOYEES WHAT THEY WANT

No modern IT solution can survive if it isn't created and customized to meet the expectations of a modern digital consumer. The new role of the CIO is about ensuring they involve end-users, early and often, when planning new solutions and technology changes. From agile development, to design thinking, user feedback is the North Star that directs major digital journeys.

CHANGE MANAGEMENT AND REDUCING FRICTION

Our IEF members showed that change management is increasingly becoming one of IT's main responsibilities. Tech leaders are now charged with putting together extensive training, education and adoption plans. With changing demographics, they must also ensure different service levels are available in different formats catering to legacy and new digital generations. Others argued the best form of training is to simply build the best, most innovative products. No one needs a manual to learn how to use an app like Uber. You shouldn't need one for modern IT solutions, either. "Everything we do is ultimately about reducing friction," said one IEF technology leader.

CREATING ENVIRONMENTS FOR INNOVATION

Good ideas come from people — people with the right tools, freedom and responsibility, that is. Modern CIOs are finding success by establishing the environment where good ideas can flourish. Our IEF participants shared ex-amples of setting up internal "skunkworks" to carve out time to work on innovative ideas, and establishing working groups dedicated solely to thinking about how the busi-ness must innovate to stay ahead.

DIGITAL ETHICS

From Equifax's hack and poor response, to Uber's embattled ex-CEO and privacy fouls, it's quite clear that a company's reputation and trust are just as valuable — if not more — than the products or services they offer. Modern IT leaders must help businesses adequately protect consumers, foster trust and avoid catastrophe. Ethics are tough to navigate. And the effects of technology are hard to predict. Modern CIOs must do their best to provide leadership in digital ethics, and ensure precautions are taken.



One guest speaker at an IEF conference call summed it up best: "Throughout my career, I've been taught to put people first — and the profits and products will follow."

User experience, adoption and personalization aren't just buzz words. They are the essence of what good technology is all about. With it, comes a faster return on investment, proven value to the business and end users, and the innovative ideas needed for businesses to thrive and evolve in turbulent times.

"Every week, customer expectations are rising, and we need to be able to meet those, to make their lives a little easier."

IEF Member, Washington, USA





THE SECURITY MENTOR: "There's no such thing

as 100% secure."

IEF Member, Washington, USA

Firewalls alone are no longer enough. IT leaders are forced to operate in a world where hacking has become big business and the tools to do it are cheaply available for up-and-coming criminals. From our discussions, it was evident that virtually all of our IEF members have suffered ransomware attempts. If you are reading this, chances are your organization has too.

This rise in advanced threats has caused a change of perspective in the security industry. It's no longer reasonable to try and prevent all attacks. "There's no such thing as 100% secure," said one IEF member, a typical refrain we heard repeated, all year. Meanwhile, IT leaders continue to struggle to find a budget for all their security requirements, and are left with sleepless nights, worrying about what could go wrong if things don't change soon.

THE STRATEGIES

Modern CIOs know their security woes cannot be completed without the full support and adoption of both leadership and end-users. They are also turning to new approaches, focusing on detection, multiple layers of defense, and cloud intelligence.

PROVE THE RISK, CELEBRATE WINS

Modern CIOs are finding success by focusing on educating executives on recent trends as well as raising the alarm on gaps in their security posture. They point to real life examples in the news, as well as conduct concrete gap analyses to position the security problem in terms the business can't ignore. "Never put a good crisis to waste," was another common saying during our IEF discussions in 2017.

Even when security budgets are increased, IT leaders must continue to prove its value to the business, and frequently report on how much damages were avoided, or embarrassment saved, by the investments the business made.

BEYOND PREVENTION WITH MULTIPLE LAYERS AND INTELLIGENCE

"We grew up in era of protection. It's now about detection; being able to monitor the end-users, the traffic and the devices in your environment." That was the advice we received from a Security Leader during an IEF Spotlight Interview. For CIO leaders today, new security investments and tactics are needed at multiple levels, from the data center, to the network, to the multiple devices and users operating on the edge, such as phones, internet-connected technologies and your neighborhood cafe WiFi.

New CIOs are also adding machine intelligence, expert crowdsourcing and automation to combat sophisticated security threats proactively, and at speed. "The ability of cloud providers to pull from global resources, and do global device monitoring and analytics is huge. It's all about leveraging that scale," said one IEF member.

END-USER PREPARATION, TRAINING AND EDUCATION

The most dangerous threat to your organization isn't malware or hackers. It's that complex, carbon-based lifeform that sits between the keyboard and the office chair. Your users.

No matter how advanced your security strategy, you can never avoid human error completely. As such, today's Security Mentor CIO is dedicated to setting employees up for success and mitigating risk. Intensive user education, testing and social pressure (in the form of gaming, and sometime shaming) are common examples of how IEF leaders are dealing with their people problem.



The whole point of Security mentorship is about proving security has its own inherent business value. A secure organization avoids expensive catastrophes, such as the loss of data, consumer trust and often hefty fees. Meanwhile, trust and good data stewardship aren't just prudent for today's businesses. They are table-stakes. If you can't protect your data, you can't run a business in the 21st century — at least not for very long.

"Never put a good crisis to waste."

IEF Member, New York City, USA



THE DATA WHISPERER

"A lot of what we have, I call business 'information.'
The intelligence part simply isn't there yet."

IEF Member, Nova Scotia, Canada

Big Data and the cloud were just the beginning. Next up is the promise of artificial intelligence, automation and personalization. Businesses are past the point of wondering if these technologies are worth pursuing — asking only how to do it right, and when to get started.

Yet, as data becomes cheaper to create and store, and disruptive technologies enter popular use, complexities are on the rise for IT and the business.

"We all have all this data. The question is 'how do you find a revenue stream in it?"

IEF Member, Newfoundland and Labrador, Canada

THE STRATEGIES

A new role for the CIO is needed here — the Data Whisperer. This leadership style challenges the organization to focus on finding insight and aligning data to business goals. It also pushes the business to adopt emerging technologies — such as A.I. — in meaningful, governed and predictable ways.

ASKING THE RIGHT QUESTIONS

Modern CIOs realize the most important part of data is the insight it drives to the business. Collecting mountains of transactional and market information means nothing unless the business is able to use that data to drive decisions. New IT leaders are focused on helping shape those conversations with data, pushing the business to ask the right questions. They treat data as a strategic means for finding insight, not a valuable resource on its own. Data has the power to tell a shop keeper where to display the beer, or how to optimize a grocery store layout. But it will only talk if you ask it to.

KNOWING WHEN TO SAY WHEN

Modern IT leaders also prevent turning data warehouses into data swamps by reducing and filtering the kinds of data they collect. By defining up-front if the data has a business value, they make productive choices on what is stored and what is scrapped. Meanwhile, consumers understand marketers use personal data to improve services — but there is a point where you cross into "creepy" territory if your business is collecting too much info.

PUTTING AI AND AUTOMATION INTO ACTION

Big Data might seem like old news but artificial intelligence and automation are reaching new levels of hype. Modern CIOs understand the importance of treating these emerging tech-nologies in the same way they handle data. First, they define its value to the business. From there they set out on finding practical use cases to prove the value these solutions offer. Today's CIOs are active in finding low-hanging fruit for artificial intelligence automation, and new customer experiences such as chatbots and voice UI.



When data is asked to talk, it can tell a wonderful story and unveil new business models and opportunities. Clearly, there is value in asking these questions, and doing more with the insights your data has to offer. As one IEF member said: "There is a ton of unstructured data being created in our business — and there is gold in all of that. We need to uncover it."

Staying ahead of the competition, and avoiding intermediation by scrappy start-ups is just one key business value offered by the New CIO. Concrete costs savings on storage, reduced risk of exposure and an ongoing optimization of new products and services are a few others.

"Analytics is key for us. In a very competitive world, that's our leverage. That's our advantage."

IEF Member, Washington, USA



CONCLUSION

In 2017, we traveled the continent, learning what it takes to be a CIO in the modern digital world.

The insights we gathered revealed there wasn't a single answer — but several. Modern IT leaders need to straddle numerous challenges and opportunities, including new technologies, end-user experiences, advanced security and data stewardship.

TIP OF THE TONGUE, TOP OF MIND

Every time we met IT leaders during our IEF events in 2017, we took notes — and lots of them!

As we put together this year-end report on the trends we expect in 2018, we assembled all our post-event summaries and notes into a single Word document, and pasted all that text into an online word generator. After automatically scrubbing irrelevant and redundant terms, the picture that emerged was stunning. It aligned perfectly to what we had on the tip of our tongues all along:



At the center of this word cloud, and the world of technology leaders by extension, is the big, unavoidable term "business." Call it the center of gravity, the point at which everything else relates to and merges. Orbiting this central point of our technological solar system are four other terms that are clearly larger than the others: technology, people, data and security. Beyond these, a chaotic mesh of terms such as disruption, change, customer and work.

This picture is worth far more than the thousands of words used to create it. It provides a simple diagram, a map, for the way modern IT leaders act today in order to get their jobs done.

IT leaders today are primarily responsible for adding value to the business. But they do so in four distinct modes of action. They are **The Technology Orchestrators**, putting together the jigsaw puzzle of chaos and tech for maximum results. **They are People's Champions**, putting end users front and center with every design and technological decision. They are **Security Mentors**, providing caution and guidance to executives and end-users alike. And they are **Data Whisperers**, unlocking the hidden value of data and taking practical steps to take their business "into the new."

