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BY BETH STACKPOLE

GENDER GAPPED

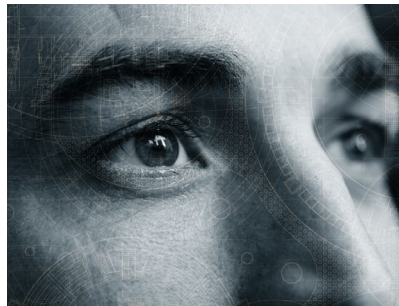


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IT innovation takes flight at Embry-Riddle

Innovation isn't an end goal; it's a means to creating a positive business impact. That won't happen, at least not reliably, without taking a strategic approach.

BY MARTHA ROUNDS

“How do we change IT from being a Department of No?”

Four years ago, that was the question Becky Vasquez faced when she assumed the CIO role at Embry-Riddle Aeronautical University, Worldwide. IT at Embry-Riddle, like a lot of traditional enterprise IT departments, had

somewhat of a negative reputation among its customers around the university when Vasquez arrived. She resolved to make IT a respected, valued, full-fledged partner working with faculty and administrators on transformative technology projects. This took planned, persistent effort.

Restructuring for visibility

When she arrived, Vasquez had two direct reports responsible for managing a majority of the university's IT team. But the structure wasn't working. “I was losing visibility into the IT organization, and I wasn't able to reach up and down quickly and pivot,” she says. So,

IT was restructured into six key areas: customer engagement and support; applications and productivity; networks; servers and cloud administration; cybersecurity; and the office of the CIO, which includes Vasquez, the architecture team, the project management office, and administrative opera-



“Now, we have the opportunity as technology leaders to be **transformative partners** for the business.”

— **BECKY VASQUEZ**, CIO, EMBRY-RIDDLE AERONAUTICAL UNIVERSITY

tions, each of which is headed by an executive director who reports directly to Vasquez.

Since the restructuring, communication up and down the IT ranks has increased and become more efficient, Vasquez says. Still, she knows that whenever you have any kind of divisions, you can potentially create silos, which work against the goal of tighter integration with the business.

To this end, Vasquez is embedding IT staffers in various business units as a means of creating partnerships between technology professionals and the business functions they enable. The goal is for these embedded IT professionals to bring forth solutions based on firsthand knowledge of the business’ operations and needs.

“This is how business-IT partnerships can happen,” she says.

Becoming a transformative partner

Today, IT is involved in projects from the very outset, working collaboratively with university personnel in designing project requirements and weighing risks and rewards. “Having IT be part of the process up front has made all the difference in the evolution of the IT department,” says Vasquez. “Now, we have the opportunity as technology leaders to be transformative partners for the business.”

A recent example of this partnership is the university’s virtual crash investigation and aerial robotics labs, which provide an interactive environment for simu-

lated aircraft accident investigation, drone design and build, and test-flight capabilities. Embry-Riddle’s Worldwide Campus has 150 classroom locations around the world and extensive online learning for more than 26,000 students. Historically, similar lab spaces have been limited to traditional university settings and a physical space. However, the new virtual lab, built on a gaming engine, provides an opportunity to offer lab space online, eliminating physical restrictions. The virtual labs, which are not available commercially, are the first of their kind for aviation aerospace education. “They simply aren’t available elsewhere,” Vasquez notes.

The idea of the virtual lab was brought forth and championed by

faculty who are experts in their respective fields. But once IT started the request-for-proposal process, Vasquez says the team realized this type of environment did not exist. Instead of waiting for a commercial product, IT worked closely with the College of Aviation and a development partner to build the lab.

As Vasquez’s experience shows, innovation is simply too critical to be left to happenstance and serendipity. Today, the university’s IT organization isn’t just providing technology, Vasquez says. “We’re changing lives through providing education.” In today’s data-driven, customer-centric world, IT leaders need the energy, creativity, business knowledge and technical skills of IT organizations that fully understand their company’s business goals — plus how and where IT fits in. ♦

Martha Rounds is research director for IT executive research at IDC. Contributing author Julia King provided support for this article.



IT's latest survival skill: Embracing risk

In today's digital business world, IT has to stop playing it safe, as you can't innovate without taking some risks. Still, most IT professionals remain deeply risk-averse.

BY MINDA ZETLIN

If you've spent your career in IT, you're probably adept at making sure nothing goes wrong. Outages are unacceptable, even for a few seconds. Cybersecurity is a constant worry. Success is measured in reliability and availability. Your most important skill is anticipating and fixing issues before they occur.

There's just one problem: In this

time of rapid change and disruption, making risk avoidance your top priority will only help you get left behind. Today's IT leaders must accept and embrace a certain amount of uncertainty and risk. Even more challenging, they must help those who work for them embrace it as well.

Taking risks and sometimes accepting failure is a necessary

aspect of innovation and digital transformation. C-suite executives know this, and they also know that risk-taking may not be in IT's DNA. This is why many organizations separate innovative and riskier initiatives from traditional IT, handing them off to a chief innovation officer or chief digital officer instead.

But that's the wrong approach, says Bob Worrall, CIO of Juniper

Networks. "It's a cop-out from two different perspectives," he says. "First, I would venture to say that if you asked our C-level staff who our chief innovation officer is, they would answer that every top executive is a chief innovation officer. Identifying a single person who can lead innovation across the whole company is a crazy notion."

The second reason is that IT will

be deeply involved in any technology that gets deployed. “I’ve seen this: You come up with a chief innovation officer and that person creates a byzantine application that requires a lot of work from IT,” he says. “Pretty soon, you’ve created a gap between IT people who have to support the function and the people living in this glass palace. If you’re looking to the CIO to be chief innovation officer and he or she isn’t accomplishing that task, replace the CIO. Don’t create an organizational mess because you have the wrong person in that chair.”

The message is clear: IT has to get out of the risk-avoidance business and into the risk-taking and innovation business, at least some of the time. How do you make that transition? Experts who’ve been there offer advice.

Get uncomfortable

When Worrall joined Juniper Networks as CIO in 2015, the company was in the middle of a seven-

year transition from on-premises IT to the cloud. Juniper completed the transition and closed its last data center in December 2018. It was a bold move, and not everyone in IT was comfortable with the changes or risks.

Juniper’s IT employees were offered a choice, Worrall says. “Either choice is fine, but the choices were, ‘I like the predictable nature of the IT work I’ve historically done; I’m uncomfortable with this newfangled technology.’ But if that’s the case, Juniper probably isn’t the right place for you, long term. The other choice is that you might not be comfortable with the idea of changing technology and a little bit more risk, but think of it

from a career development viewpoint. Think of the added credentials. We tried to sell it to people that way.”

He estimates that about 75 percent of Juniper’s IT employees stayed in IT after the transition to cloud, and 25 percent left, in some cases for other parts of the company.

Celebrate failure

If you adopt a less risk-averse approach to technology, more will go wrong. But experts say that’s a feature, not a bug. “Failure sounds like the f-word,” says Scott Buchholz, CTO of Deloitte Consulting’s government practice. But if you treat failure as something that shouldn’t have happened, you may

not examine it. And then you miss the benefit of having failed.

“Let’s say we have a hypothesis that if we apply machine learning to a customer retention problem, we will be able to improve customer retention,” Buchholz says. “You try it out and you don’t get the result you expected. It doesn’t necessarily mean the whole idea was a failure. It could be that the technology wasn’t ready, or that the data wasn’t good enough or not in the right state. Unless you figure out why you didn’t get the result you were expecting, it’s really hard to learn from that experience.”

When something fails, it’s important to recognize that fact and deal with it right away. Unfor-

The message is clear: **IT has to get out of the risk-avoidance business and into the risk-taking and innovation business, at least some of the time.**

tunately, the culture of most organizations makes fast failure very difficult, says Irving Tyler, a research vice president at Gartner.

“The real difference between an innovation portfolio and a traditional asset portfolio is uncertainty,” he says. “You have to be willing to kill things, to constantly take things out of the portfolio. But in a traditional business approach, once things are approved and associated with someone’s name, they never die. That person will do everything possible to make sure that initiative lives on forever.”

Instead, he says, CIOs and C-suite executives should be more like venture capitalists: “If you look at the hit rate of a VC, their hit rate is bad. But they’re good at getting rid of things before they get too expensive.”

Encourage risk-taking

There’s no point asking employees to be open to innovation and failing fast if they know they’ll

have a career setback if things go wrong.

“Most leaders aren’t necessarily aware of the incentives and counter-incentives affecting employees,” Buchholz says. “I work with a number of large bureaucracies, and in bureaucracies, the punishment for failure is always disproportionate to the reward for things going right.” If this is true in your organization, you’ll have a tough time getting anyone to try anything new.

At the same time, make sure to reward employees who are more open to innovation and risk-taking. “For the part of the population who want things to always stay the same, no amount of persuasion is going to change their minds,” Buchholz says. “On the other end of the spectrum are people who like trying new things and making changes, and the easiest place to start is with them.” Encourage these employees to take the lead on new projects,

“The real difference between an innovation portfolio and a traditional asset portfolio is uncertainty.”

—IRVING TYLER,
A RESEARCH VICE PRESIDENT
AT GARTNER

and make sure to highlight their efforts to the rest of the team, he says.

Start with pain points

Where’s the best place to encourage innovation and risk-taking? Look for systems that aren’t working as needed, where frustration levels are high and there seems to be little to lose.

That’s the approach Vijay San-

karan took when he became TD Ameritrade’s CIO in 2016. At the time, he says, IT was struggling with uptime and completing projects on deadline. He knew that a move from waterfall to agile would make a big difference, but it meant taking many IT employees out of their comfort zone. “There definitely was a fair amount of change management that had to happen,” he says.

To make the transition easier, he started with what wasn’t working. “We really tried to focus on pain points, places where people were dissatisfied with the status quo,” he says. “For example, we had no [remote office/branch office] solution. If we wanted to get into that, it would have taken two years the waterfall way, and the market was moving much too fast. So, it became a good example of a risk worth taking.” ♦

Minda Zetlin is a frequent contributor to CIO.com.

GENDER GAPPED

The tech sector has made strides attracting more women and inching closer to equal pay. But a glaring disconnect remains in how men and women view gender diversity progress in IT.

BY BETH STACKPOLE

The way **Melissa Di Donato** sees it, there are three types of women in tech: those vying to improve gender diversity in the workplace, those who opt out because the journey is hard and they don't feel they have sufficient voice, and those who don't realize they're the only woman in the room.

For decades, Di Donato considered herself the latter, steadily climbing her way up the male-



dominated corporate ladder to become the first woman CEO of SUSE, an open source Linux provider. Di Donato, who says she's always embraced her femininity with her signature big hair and stiletto shoes, rarely contemplated the idea of gender as a barrier until she attended a women in tech luncheon eight years ago, reluctantly, at the urging of a male mentor.

"I told him I don't do women lunches — I'm getting along just fine and I'm happy being me," says Di Donato, who admits to doing a complete reversal after listening to women recount their hard-fought battles for success amid a rampant and glaring gender divide. "I started hearing the stories and thought, we do have a problem, we do have a pay gap, we do have visibility issues. My head was so down in the weeds, I didn't realize."

Di Donato, then an executive at Salesforce, applauded CEO Marc Benioff's public commitment in 2015 to close the gender pay gap and elevate diversity. Years into that initiative and despite the strides Salesforce and other tech companies have made, Di Donato

"I started hearing the stories and thought, we do have a problem, we do have a pay gap, we do have visibility issues."

—MELISSA DI DONATO, CEO, SUSE

contends there's still a long way to go to achieve gender parity beyond hitting milestone goals for equal pay. Specifically, there is significant work to be done to address distortions in how women and men view gender equality and the progress made to date. "Men see a steady increase in the number of women leaders and think the problem is solved, but it's not proportional enough to be at 30 percent, which is where they say

a minority's voice is heard," she explains. "The minute we stop talking about it, men think the problem is solved, yet women still feel disadvantaged."

participation in the general workforce jumping from 38 percent in 1970 to nearly half (47%) by 2014, the percentage of women in tech-related occupations peaked in the

Measuring the perception gap

Increasing the number and profile of women in tech has been a persistent struggle. For decades, the number of women fielding technology and IT-related occupations has paled in comparison to other high-profile fields such as medicine, law, and the physical sciences. While the U.S. Census Bureau and other government reports show women's



early 1990s to settle in at around 25 percent in 2014. A June 2019 IDC Women in Technology survey found women comprised 21 percent of employees at technology companies with a larger (34%) share in specific technology roles.

Perhaps even more distressing than the still-lackluster female

presence in tech is the glaring disconnect in how men and women view progress made on gender equality. Male respondents to the IDC Women in Technology survey gave their firms high marks for diversity and inclusion across the board, with 45 percent specifically commending their firm's gender diversity efforts. In contrast, only 29 percent of female respondents felt their organizations were doing enough to tackle gender diversity issues.

Divergent views

When it comes to equal pay and title equity, the delta between genders is even more acute. Three quarters of male survey respondents believe employers are paying both sexes equally compared to only 42 percent of women. At the same time, 67 percent of men believe the current status of federal, state and local laws are suf-

ficient to ensure men and women are paid equally for similar work while about one-fifth (21%) of women respondents said the same, the IDC survey found.

Lack of transparency is the biggest hinderance to achieving pay parity, yet even there, men and women diverged. Only about a third of women respondents said human resources or top management shared pay ranges with employees, compared to 62 percent of men. Less than a third of women said they are in a position to see other employees' pay, versus 63 percent of men, and only 17

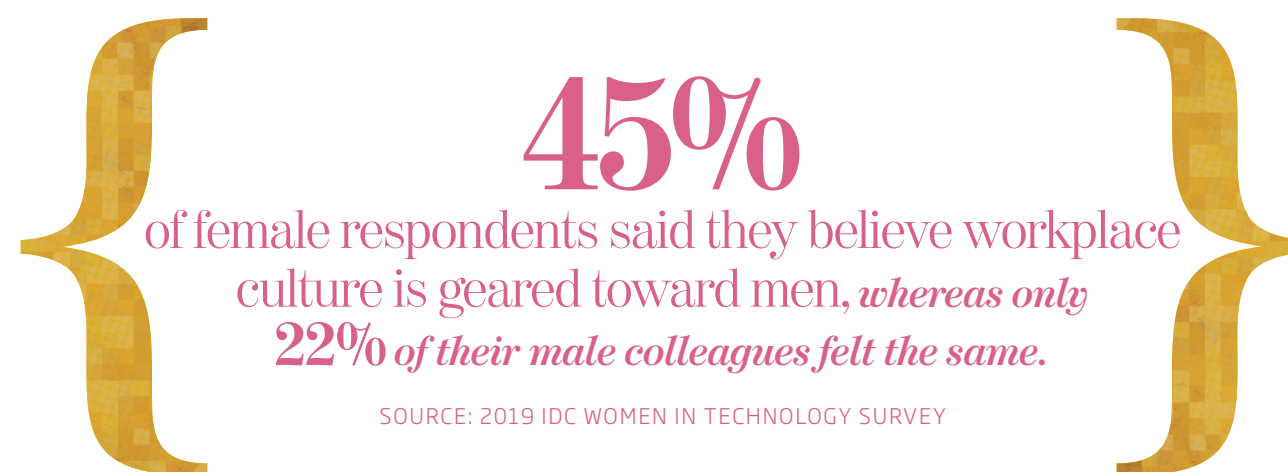
percent of women felt comfortable sharing their compensation details with coworkers compared to 44 percent of their male counterparts.

Pay parity raises problems on many levels, but compensation is a much bigger deal for women, according to the survey. While conventional wisdom is that women care most about job benefits and flexibility, the IDC survey found both men and women ranking compensation/pay, work-life balance and a sense of purpose or mission as their top measures of a successful job or career — women more so than their male col-

leagues. Whereas women trained their focus on opportunities for career advancement, supportive management and flexibility in schedule (including the ability to work from home), men were more concerned with skills improvement and on-going learning, benefits and working with a diverse team, the research found.

Why diversity efforts fail

At the root of many gender-related misconceptions, unconscious bias leads to workplace environments that are at best unwelcoming to women and at worst downright toxic. For example, 45 percent of female respondents to the IDC survey said they believe workplace culture is geared toward men, whereas only 22 percent of their male colleagues felt the same. Thirty-three percent of female respondents said there was a lack of professional support



SOURCE: 2019 IDC WOMEN IN TECHNOLOGY SURVEY



“Equality cannot be an add-on or an afterthought — it must be baked into your DNA — and this commitment to equality sets the tone from the top down,”

—MOLLY FORD, SENIOR DIRECTOR OF GLOBAL EQUALITY PROGRAMS, SALESFORCE

for women in STEM roles vs. 18 percent of men, and 35 percent of women worried that taking time off to care for children or other family members could potentially derail their career — a worry cited by only 23 percent of male respondents to the IDC survey. Women were also twice as likely to report that their workplace promoted a culture of sexism and bias, with 41 percent attributing these and other

gender-related issues to unconscious bias, compared to only 28 percent of their male colleagues.

If organizations don’t commit to confronting the unconscious biases baked into organizational DNA, all the pay raises, diversity groups and efforts to fill the pipeline with more women will achieve limited results, most of which won’t be sustainable over time, according to Barbara Annis, CEO and founder of the Gender Intelligence Group, a consultancy specializing in gender diversity and leadership training.

Gender diversity efforts often hit

a wall, Annis contends, because companies leap into specific programs — for example, starting a women’s networking group or introducing recruiting quotas — without understanding the inherent differences between the sexes and using those differing perspectives to shift culture and inform gender diversity strategies.

“With the best of intentions, they think, ‘Let’s go out and recruit women and minorities,’ making the assumption that that will fix the problem,” she says. “But they are filling the pipeline versus questioning whether they have a culture that creates the highest level of moral engagement and

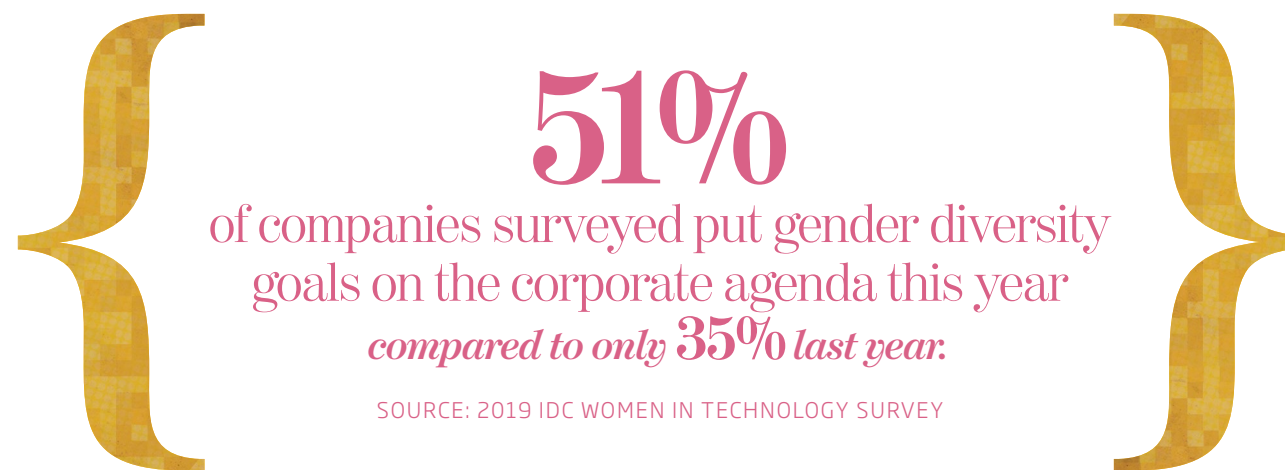
satisfaction for men and women. Companies that have done well with gender diversity have done the work to transform culture.”

Creating a culture of diversity

Salesforce is one of the most-cited success stories of companies tackling the gender diversity problem head on. Currently, women comprise 31.6 percent of the company’s workforce, up from 30.9 percent last year, and the tech giant says it grew women in leadership positions by 28.3 percent in the same time frame. In addition to its well-publicized effort to

ensure equal pay for equal work (Salesforce has conducted four global equal pay assessments and plunked down more than \$10 million to address unexplained differences in pay between men and women over the past four years), the company has a number of programs in place to promote gender diversity. That includes the Salesforce Women's Network, an enviable 26 weeks of paid parental leave, formal allyship and mentoring, and a focus on metrics, including making diversity data available to the executive team on a monthly basis so they can monitor results and keep diversity goals top of mind, according to Molly Ford, Salesforce's senior director of global equality programs.

Beyond the impressive lineup of diversity-focused programs, Ford emphasizes that milestone movements come with sweeping cultural change — in Salesforce's case, an emphasis on transparency, deep listening and top execu-



tive commitment. At Salesforce, employees can share feedback or report concerns on an anonymous third-party hotline, and there are 12 employee resource groups providing community for under-represented groups and their allies, helping to create a culture of diversity and inclusion, she says.

“Equality cannot be an add-on or an afterthought — it must be baked into your DNA — and this commitment to equality sets the tone from the top down,” she says. “It’s critical that leaders are engaged in order to influence major organizational change.”

The business impact

A quorum representing diverse backgrounds, genders, and ethnic and cultural identities has been shown to discourage groupthink and spark innovation, help draw top-tier talent and make companies more productive. In contrast, lack of overall diversity is now widely recognized as being detrimental to business, creating a breeding ground for a host of issues, from missed business opportunities to future staffing gaps to being pigeonholed as a laggard or irrelevant in a period in which diversity is a

hot-button topic. According to the IDC research, 86 percent of respondents report some sort of business impact from lack of diversity. Yet there too, the survey revealed significant differences across genders. For example, 35 percent of women respondents said their firms missed out on business opportunities and new ideas because of lack of diversity — a sentiment shared by only a fifth of male respondents. Men were more likely to see diversity as a driver for future staffing gaps (17%) compared to 11 percent of women.

There are other systemic workplace problems associated with lack of diversity. For example, employees in organizations characterized by a high level of gender diversity are less likely to have experienced workplace discrimination (60%) than employees at firms ranked with low gender diversity ratios (75%). When there is workplace discrimination reported, the gender gap persists in terms of how the organization

is perceived to take action: Nearly half (48%) of males surveyed by IDC said they believe their company considers claims seriously and makes a quick and decisive response while only 32 percent of women felt the same.

Overall, the IDC survey revealed that senior management at tech companies needs to significantly ramp up diversity initiatives if they want to engage more women. While nearly half of the men surveyed gave their organizations high marks for a range of diversity benchmarks — for example, staffing diversity specialists, having diverse leadership, goal setting and measurement, ample funding and following through on promises — less than a third of women gave their organizations high marks on those same measures.

Companies that don't make the effort to address diversity as a systemic and endemic problem will have problems attracting and retaining female technologists, Annis

says. "It comes down to what causes women to quit and what encourages them to stay — pay and equality don't do that," she says. "Ultimately, the fundamental reason why women leave is because they don't feel valued in an organization and they don't see opportunity."

veyed put gender diversity goals on the corporate agenda this year compared to only 35 percent last year. Increasing the proportion of women as a percentage of the workforce was the No. 1 goal followed by increasing the proportion of new women hires and

"If an organization doesn't have women in technology leadership, it's hard for some women — if they can't see it, they can't be it."

—CAROL JUEL, EVP AND CIO, SYNCHRONY

Slow and steady progress

While the IDC survey sheds light on continuing challenges related to gender diversity, the good news is that progress is being made and company diversity goals and strategies are on the rise. More than half (51%) of companies sur-

achieving gender balance by a certain date. Men were far more bullish on the likelihood of the firms meeting gender diversity goals — 89 percent compared to only 65 percent of female respondents.

The number of women hired and moved into leadership positions is also on the rise. According to the IDC research, women now comprise 37 percent of all employees of

companies surveyed, up 3 percent from last year, with 34 percent of new hires now female. Women also comprise a bigger percentage of senior leadership — 24 percent this year compared to 21 percent in 2018. Once again, there were gender differences in the optimal targets: Women believe nearly half (49%) of mid-level and entry-level employees should be female with





“[My former boss] told me, ‘Don’t let them underpay you — you have the exact same experience I had for the role, and here’s the range you should go for.’”

—KATIE SHAKUN,

DIRECTOR OF IT, OPERATIONS, BROAD INSTITUTE

46% representation among board members, C-suite and senior management; for male respondents, the optimal number was 35 percent for women as mid-level and entry-level status and 32 percent representation in upper-level leadership and board positions.

The swells of women in senior leadership has a huge impact on engaging women, and companies with a strong bench of women

leaders are more likely to be considered trustworthy and offer equal pay. At companies with ample female leadership representation, women are also

inclined to stick around longer than a year and report higher levels of job satisfaction, the IDC survey found.

“If an organization doesn’t have women in technology leadership, it’s hard for some women — if they can’t see it, they can’t be it,” says Carol Donovan Juel, executive vice president and CIO at Synchrony. “If there aren’t enough role models, women don’t understand their career path or what they should do.”

In fact, Juel dropped off the consulting path early in her career because there were so few women partners; she wasn’t confident she could blaze a trail. That changed during her next chapter while at General Electric where three women CIOs led the technology organization during her tenure. When she stepped into the CIO role at Synchrony after it was spun off from GE, she took the reins from a woman. “I worked directly for a lot of amazing women over the last eight years of my career, and it matters,” she says. “I learned a ton about leadership, about the challenges women face, and how someone else managed and grew their career.”

Mentoring is a must

In addition to exposure to strong female leaders, access to male mentors and champions is crucial for women to find their way. Katie Shakun, director of IT operations at Broad Institute, says she too was typically the only female in the room during her early days in IT. But a network of male colleagues made sure she was always an integral part of the group while encouraging her to take risks she might not have otherwise considered. “It was less about the gender divide and more about coming together as a team, having fun and doing our jobs well,” she says.

When a former boss announced his departure, Shakun approached

him to say she was interested in applying for his post and he was all in, she recalls. That executive became her biggest champion, prepping her for success and coaching the negotiations. “He told me, ‘Don’t let them underpay you — you have the exact same experience I had for the role, and here’s the range you should go for.’” “The information he was willing to give me and the confidence he instilled — he told me I could do the job and be successful at it, and that gave me all the confidence in the world that I wasn’t overshooting.” Shakun landed the job and ultimately continued to move up the ladder at Broad Institute, to her current position.

Building diverse teams

at TIAA, male colleagues are encouraged to be allies and show it. This doesn’t just mean mentoring female colleagues, but also being account-

able for building diverse teams, according to Ned Carroll, senior managing director and chief data officer for the financial services company. Male managers are advised to be deliberate about how they build teams, including creat-

everyone has unconscious biases and part of managing them is understanding that individuals have a predisposition to choose people who are like them or have previously been successful completing a big project.”

35% of women respondents said their firms missed out on business opportunities and new ideas because of lack of diversity — *a sentiment shared by only a fifth of male respondents.*

SOURCE: 2019 IDC WOMEN IN TECHNOLOGY SURVEY

ing diverse candidate slates for hiring that are reflective of diversity in multiple facets, including gender, skill sets and even seniority. “Today, most tech leaders are male and may let familiarity influence hiring and promotion decisions,” Carroll explains. “It’s important to acknowledge that

In fact, the IDC research confirms that professional mentoring is strongly associated with higher salaries. Both male (66%) and female (59%) respondents made ample use of mentors throughout their careers, but women are much more reliant on men for mentorship, which makes sense given

their greater numbers. In addition, men maximize their time with mentors more so than women — the IDC research found 70 percent of men meet with their mentors daily or weekly compared to only 29 percent of women who do so. But male mentors are more apt to advocate for women when there are few female senior leaders in their organization.

Support for risk-taking

andrea Leszek, who has been with Salesforce since its first year, says having both female and male mentors has been instrumental to her career trajectory. “Each time my career has taken a leap forward, it’s been a big risk and something I wasn’t sure I could do because I hadn’t done it before,” says Leszek, now Salesforce’s COO of technology. “Having the support of mentors and managers to encourage me to take those leaps really has been

key to my growth.”

For example, when Leszek put her hat in the ring for an enablement function for the technology team, she pitched herself as the best person for most of the job but told the hiring executive she wasn't sure about a particular function. Her mentor made her see that she underestimated her abilities and encouraged her to make the case she was fully ready for the promotion. Similarly, a different mentor was instrumental in Leszek going for her current role.

While Leszek had the drive and organizational support to climb the Salesforce corporate ladder, the IDC survey found women significantly less convinced about their senior leadership prospects, whether it's because they don't have the desire to be an executive or they feel they're not part of the boys' club. Only a quarter of women see potential to be promoted to executive management while more than half (54%) of

male respondents feel confident in their senior leadership prospects, the IDC research found. In addition, women are more likely to aspire to a board seat or a C-suite role and less likely to want to be CEO or president compared to their male counterparts (43% vs. 22%). To get there, men believe they need to develop skills in areas such as management, communications, leader-

“I was able to connect the dots that men didn't see and bring conversations together that resulted in better outcomes.”

— JEANINE CHARLTON, SVP AND CTO, MERCHANTS FLEET

ship, decision making, delegation and presentation skills, whereas women are more likely to focus on political acumen and senior management support.

Embracing strengths

For Jeanine Charlton, now senior vice president and CTO at Merchants Fleet, years in IT at EDS, catering to the automotive sector, taught her how to hold her own with an old boys' network. At the same time, however, she learned to recognize and embrace her inherent strengths, even if some

rate groups, thus she played up those traits and worked them to her advantage. “I was able to connect the dots that men didn't see and bring conversations together



that resulted in better outcomes,” she says. “A lot of times women in technology focus on the technical aspects of the job. For me, bringing those other skills into the work-

place helped me.”

As women such as Charlton ascend to the top leadership ranks, they are committed to nurturing up-and-coming female technologists in ways that perhaps weren't

programming in grade-school girls and teens. SUSE's Di Donato orchestrated her firm's first formal mentoring program and feels it's her responsibility to do whatever it takes to pay it forward.

Only **25%** of women see potential to be promoted to executive management, *while more than half (54%) of male respondents feel confident in their senior leadership prospects.*

SOURCE: 2019 IDC WOMEN IN TECHNOLOGY SURVEY

possible during their early career. Synchrony's Juel is a sponsor of the company's Women's Network, is actively involved in the firm's mentoring programs, and was a key orchestrator of a Synchrony partnership and summer immersion program with Girls Who Code, a nonprofit whose mission is to encourage love of STEM and

“I'm lucky to have a platform to stand on by being the first female CEO [at SUSE],” she says. “I don't owe my gratitude forward — I need to utilize my role to pave the way and encourage more women to follow.” ♦

Beth Stackpole is a frequent contributor to CIO.com.

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Redesigning business processes for digital success

CIOs find themselves in a unique position to reimagine how their organizations operate in this digital age. Here's how to develop a vision for business process reengineering and deliver.

BY MARY K. PRATT

A **British utility had** a customer service problem: Customers who questioned their bills had to navigate a tedious process to handle the complaint. They had to contact the company to schedule an appointment for a worker to visit their home to reread the

meter, a reading that was then fed into the corporate system that would later generate a new invoice.

Start to finish, the process took about a month — and, not surprisingly, created a number of unhappy customers.

Utility executives saw an opportunity to do better.

Ashok Pai, global head of cognitive business operations at Tata Consultancy Services, worked with the utility's CIO to explore not just where technology could aid the utility in fielding the customers' complaints but whether it could transform how the company handled these requests.

The solution: An app that allows customers to snap photos that are then read by optical character recognition software and processed to generate new bills. The app even gives customers the option to pay their newly generated bills immediately.

“It's a complete reimagining of

Business leaders continually **stress the need to reimagine** how their organizations work to remain **relevant** in this digital age.

the business process,” Pai says.

And it was a success.

Business leaders continually stress the need to reimagine how their organizations work to remain relevant in this digital age. In many cases, that means reengineering business processes.

Functional business leaders once had nearly sole responsibility for redesigning business processes, experts say. But not anymore. Today, technology not only improves business processes, it can transform them.

“It’s hard to think through any business process that isn’t influenced by technology, and that means the way that companies now deliver value to their customers is technology-driven,” says

Cecilia Edwards, an Everest Group partner who co-leads its IT and digital transformation practice. “So, CIOs need to know the technology and be the adviser on the possibilities that technology is unleashing for how business gets done today.”

Delivering vision

Irving Tyler, a research vice president at Gartner, sees business process reengineering as the most important job CIOs have today. “If you ask, ‘How much time should CIOs be spending on this?’ my answer would be almost 100 percent,” he says.

The digital revolution is forcing organizations to change their value propositions to remain com-

petitive, Tyler explains. Customers expect more. They want better quality, better service and better overall experiences.

“That in turn requires business-model change; you have to change your interactions with your clients, your channels, and maybe even the products and services you bring to the market,” Tyler says. “Most of these changes come into place through data and technology. We’re trying to change the DNA of the capabilities to make them intelligent, not just efficient.”

It’s here that CIOs can deliver real vision to their organizations.

“I encourage CIOs to reimagine the executive part of their jobs, because the business needs someone who can help them find and

understand the technology that’s necessary to change these processes. It’s about helping all the other leaders figure out how to do it within their domain,” Irving adds.

Engineering change

That’s the approach SilkRoad Technology CIO Asif Malik says he’s taking as he looks for transformational opportunities.

“I look at the business activities, the business models, capabilities, all the processes, and I look at assets and the whole ecosystem,” Malik says. He says he sees it as a business exercise. “It’s not about technology. You can’t just throw technology at it and say, ‘Yup, the problem is solved.’”

He and his IT team redesigned a cybersecurity process, streamlining and automating steps to remove manual touchpoints and speed up action using both automation and intelligent systems to deliver the new capabilities. They similarly used automation and

intelligent systems to reengineer networking operations.

Malik says CIOs are uniquely positioned to identify and advocate for business process reengineering opportunities because their role straddles business and technology more so than any other job in the company.

“The CIO can take a holistic view of the digital playground, they have visibility into business function, they know the business ecosystem. It’s the one role that can actually take a look at all the moving pieces and decide in this digital age where this company should be heading,” he adds.

Reengineering relationships

Many CIOs are already taking steps to transform their organization’s business processes.

CIO’s 2019 State of the CIO survey found that 27 percent of IT leaders said they plan to spend more time redesigning business processes in the next three years.

And BPTrends’ State of the BPM Market 2018 found that 93 percent of surveyed organizations are engaged in multiple process improvement projects; 37 percent have multiple, high-level business

are prepared to tackle transformation or let their CIOs play a leading role in business process reengineering, says Taquee Khaled, director of strategy at digital consultancy Nerderly.

sense if it’s not broken, don’t fix it,” Khaled says. But as they see their industries disrupted, they’ll find themselves scrambling to identify how business processes should change.

“I look at the business **activities, the business **models**, **capabilities**, all the **processes**, and I look at assets and the **whole ecosystem**.”** –**ASIF MALIK**, CIO, SILKROAD TECHNOLOGY

process projects underway; and 65 percent agree or strongly agree “that BPM processes and technologies have helped their organizations improve efficiency, versatility and customer satisfaction.”

Meanwhile, Deloitte found in its most recent global CIO survey that one of the two top mandates for IT leaders was “transforming enterprise business operations,” according to the 1,437 executives surveyed.

However, not all organizations

Some CIOs work in siloed organizations that limit their visibility into the processes across the enterprise, or they work with CEOs and other executives who don’t see the value IT can bring to this task. A CIO will have a harder time transforming processes, for example, if the head of sales simply wants better laptops to enable a mobile sales team and shuts down any attempts for more substantial change.

“Many companies have this

CIOs who are successful with business process redesigns use many of the same skills they do for other types of projects — identifying opportunities based on the potential returns, building partnerships with their business colleagues, forming cross-functional teams that will determine the best ways to rework the business processes, communicating the expected benefits, and then delivering the new capabilities incrementally with an agile methodology.

Opportunities abound

CIOs and executive advisers say there are plenty of opportunities to redesign business processes at every enterprise.

CIOs and their C-suite peers will want to target business processes that create the biggest pain points in the organization or have the most potential to deliver real busi-

ness value, says Noah Fletcher, a director with West Monroe, a business and technology consulting firm, and leader of its Seattle Operations Excellence practice.

“We have to make strategic choices; we can’t possibly focus on everything with the same intensity at all times. So, focus on the ones that create and deliver more value,” he says.

“We have to make strategic choices; we can’t possibly focus on everything with the same intensity at all times.”

—**IRVING TYLER**, VICE PRESIDENT, GARTNER

ness value, says Noah Fletcher, a director with West Monroe, a business and technology consulting firm, and leader of its Seattle Operations Excellence practice.

“You need strong guideposts on what’s important for the organization,” he adds.

Tyler advises CIOs to start by

identifying which capabilities or business processes within their organizations are essential, which generate value and which play supporting roles.

Like software development, Pai and others say business process reengineering takes agility and should focus on continuous improvement. As Tyler says, this work “is never done anymore.” ♦

Mary K. Pratt is a frequent contributor to CIO.com.

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