

An expert blames employers for unrealistically high expectations and unrealistically low wages

BY STEVEN CHERRY // TUE, JUNE 19, 2012

Steven Cherry: Hi, this is Steven Cherry for *IEEE Spectrum's* "Techwise Conversations."

Back in October, an article appeared in *The Wall Street Journal* with the headline "Why Companies Aren't Getting the Employees They Need." It noted that even with millions of highly educated and highly trained workers sidelined by the worst



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economic downturn in three generations, companies were reporting shortages of skilled workers. Companies typically blame schools, for not providing the right training; the government, for not letting in enough skilled immigrants; and workers themselves, who all too often turn down good jobs at good wages.

The author of the article, an expert on employment and management issues, concluded that although employers are in almost complete agreement about the skills gap, there was no actual evidence of it. Instead, he said, "The real culprits are the employers themselves."

That article drew over 500 comments on the *Journal*'s website and a suggestion from a colleague to expand it into a book. The book did indeed get written and published this month by Wharton Digital Press. Its title is *Why Good People Can't Get Jobs: The Skills Gap and What Companies Can Do About It*. And its author is my guest today.

Peter Cappelli is the George W. Taylor Professor of Management at Wharton, which is the business school of the University of Pennsylvania, in Philadelphia, and he joins us by phone from there.

Peter, welcome to the podcast.

Peter Cappelli: Thank you.

Steven Cherry: Peter, your book starts by taking apart the idea that there's a skills gap. Let's look at it, piece by piece. Employers can't find workers with adequate skills, knowledge, and experience: true or false?



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Technology has always created as many jobs as it

destroyed. That may soon change



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Peter Cappelli: The idea of a skills gap-maybe back up a second further—is the employer's diagnosis of the situation they're facing. So what they report is that our hiring systems are not producing the kind of candidates we want, they're not perhaps producing enough of them, or the ones that we're getting are too expensive. So that's the phenomenon. Their diagnosis of this is that, as you were saying in the introduction, that it's something to do with the workers themselves, the applicants, maybe the labor market, maybe the schools. There's one group missing out of this, and that's the employers themselves, of course. So one of the things that the skills gap argument does is it leaves the employers out of the picture altogether, as if there's nothing they can do about the situation they find themselves in. So the short answer to your question— The skills gap, is there one?—I think the answer is pretty clearly no. I think at least in the way most people would think about a skills gap.

Steven Cherry: Employers can't find workers at the going wage. True or false?

Peter Cappelli: That's false, and that's almost by definition the case, because we know how markets work, and markets adjust and wages adjust. I had an employer write to me the other day saying they had a skills gap, and they really did. It wasn't wages, because they did market wage surveys, and they were paying what everybody else was paying,

and all the employers, by the way, are having a skills gap, so it's a big problem. Well, if everybody's got the same problem, and you're all paying the same wage, it's probably the case that you're not paying enough. So the way markets work isn't you set the wage and say, "Well, this is good enough." You pay what it takes to get the people you need, and if wages have to go up, then so be it, right? You wouldn't say, for example, that there's a shortage of diamonds. Diamonds are very expensive. They cost a lot, but you can buy all the diamonds you want as long as you're willing to pay.

Steven Cherry: Students graduate without essential technical and academic skills. True or false?

Peter Cappelli: Well, the employers, if you look at what the hiring managers are saying and what they're looking for, they're not, for the most part, hiring people out of college anyway or out of high school. What they want is three to five years' experience. So the shortages that they report, the difficulty hiring, are for people who have quite specific skills, and those skills are work-experience based.

So the shortfall is in those people who can plug and play—that is, they can come right into our company and immediately contribute, because we don't have time or resources to train or give them time for on boarding upskilling [sic] that you'd get just by hanging around and getting used to the job. We can't do that, so you've got to be able to do the job perfectly from day one. The only

people that can do that are people who are currently doing the same job someplace else. So it's obviously pretty hard to find people if that's your definition—if you say, "We want to hire people, and they've got to be doing the job right now"-because as you've probably heard, a lot of employers won't accept applications from people who are currently unemployed. So basically we're saying we've got to hire from our competitors. And you know what? There is kind of a shortage of people if you say, "You've got to be working for one of our competitors doing exactly the same thing you're doing now. That's what we want, and it's hard to find those people." Well, it's probably true, but that's not a skills gap.

Steven Cherry: Yeah, and you have a potential solution, which we'll get to in a minute, but I just want to go through a couple more of these. Students aren't majoring in the right fields: true or false?

Peter Cappelli: Well, it doesn't look like that's true. The business degrees are now, by far, the most popular major, and that's where people are getting jobs, so that's pretty common. Liberal arts, you know, everybody thinks people have got liberal arts degrees. They've fallen like crazy. Kids are jamming the vocational schools. Community colleges are jammed with people who've already got college degrees, people trying to get practical degrees. The nursing shortage is no longer. Even the employers have said there's no shortage of nurses now, because so many people were chasing

those certificates and those degrees and those learning experiences. So the students are killing themselves trying to get courses that they think will give them a job. So they say they're not trying? That's certainly false. Sometimes it probably is true that, particularly in the tech world, skill requirements change year by year by year. The hot skill from the last few years, or certain things with respect to communications circuits and that sort of stuff, well that wasn't hot the year before. And the question is, "Can you blame a student for not being able to perfectly time what the hot skill will be three years later, when they begin their college career." You know, the employers don't have a clue either.

Steven Cherry: Yeah, I think a good example of that was the IT job market, which has been sort of a roller coaster ride, except you can't see where the highs and lows are.

Peter Cappelli: Right, and even when you can see them, the problem is it takes four years to get an IT degree. If you're lucky, you get out in four years, and the problem with that is it could be a booming market when you enter, but by the time you get out, it's a bust. And it's pretty clear that that has happened to the IT world. As your colleagues and listeners probably remember, the IT recession in 1991, where on college campuses after that, people began to bail out of IT programs and switch to other fields. That class graduated about '94-'95, which is just when the IT

boom took off, and as real complaints about raising wages and high demand for those people. So then people poured into IT programs. They graduated about 2001, which was exactly when the next IT bust began. And so you got this problem, and you're always going to have this problem if employers are relying on the schools to produce their skills for them.

Steven Cherry: Peter, when I took a course called "History of the English Language" in college, I learned that the cat you let out of the bag is the same animal as the pig in a poke. The idea was that you would get sold an animal, and you'd take them home in a burlap sack, and you wouldn't let it out until you got back to your farm because it might run off, and when you got there you would open it up and a cat would run out of the sack. A few months ago, we had on the show Peter [Michael] Junge, a recruitment director at Google who's written a book about job hunting. It's called Purple Squirrel: Stand Out, Land Interviews, and Master the Modern Job Market. He told us that when clients turn us onto a search that's particularly challenging, we say that they're having a search for purple squirrels. In your book you write about looking for a unicorn. I think maybe the unicorn is the same animal as the purple squirrel. Tell us about the unicorn....

Peter Cappelli: One of the things that used to happen is that there were HR managers in recruiting who would look at those requisitions and say, "You know,

do you really need that? Do you really think you're going to be able to find somebody like that?" And there was push back. Those people have largely been eliminated through successive downsizing, so there's nobody there to buffer those expectations. The next thing that happens is those requirements get built into recruiting software, and the recruiting software is a necessary device now, because employers have made it easy to apply for their jobs.

In the past, they wanted lots of applicants, so now they're overwhelmed by applicants, so now every company will tell you they're getting thousands or tens of thousands of applicants for positions. You couldn't possibly screen them all by hand, because you can't look at them all, so they use automated systems to do the screening. But the screening is never as good as somebody who has human judgment, and the way screening works is you build in a series of typically yes/no questions that try to get at whether somebody has the ability to do this job. And a lot of that ultimately ends up, it's all you can ask about, is experience and credentials. So you end up with a series of yes/no questions. And you have to clear them all, and I think people building these don't quite understand that once you have a series of these yes/no questions built in, and the probabilities are cumulative right? You have to hit them all, then you pretty easily end with no one that can fit.

So say that the odds are 50

percent that the typical applicant will give you the right answer in terms of what you're looking for for the first question, and a 50 percent that they'll give you the right answer to the second question. Well, then, you're down to one in four people who will clear those two hurdles, and once you run it out to about 10 questions, it gets you down to about one in 1000 people who would clear those hurdles. And by the way, the first hurdle is usually, What wage are you looking for? And if you guess too high, out that goes, right? So then you're at the purple squirrel point, where at the end of the day, you find that nobody fits the job requirement. So in the book I describe one anecdote some employer told me about having 25 000 applicants for an engineering job, a reasonably standard engineering job, and the recruiting process indicated none of them were qualified to do the job. How could that happen? Well it's not that hard once you start building in these yes/no algorithms, and you run out the list, you end up with nobody who can get through.

Steven Cherry: Now, you said that while there isn't a skills gap, there is indeed a training gap...

Peter Cappelli: Yes, and I'd say that's a big problem for public policy, because what every employer says they want, and if you look at the surveys of hiring managers, it's clear they want people with experience. There's not a shortage of people coming out of college bright and ambitious. There's a shortage of people who have done the job before, and in

many fields you can't easily learn this stuff in a classroom. You can't learn to be a surgeon in a classroom. We know that. You can't really learn to be a carpenter in a classroom. We know that. You can't learn to be a machinist. It's hard to learn to be a manager in a classroom. I mean, MBA degrees are great, but to be a good manager, you have to be able to have tried this stuff out and had the experience of doing it. So the shortfall is in giving people experience, taking people out of school who are bright and capable, and giving them the basics and getting them up to speed in these work-based skills. And the problem is, employers a generation ago used to do this routinely; now, virtually none of them are willing to do it.

Steven Cherry: You argue that leaving positions open costs companies money, and that money could actually be used to pay for training. I gather that you think inhouse and vocational training is really the solution here to this nonexistent skills-gap problem, and what is a problem of actually matching up employer's jobs and employees who want them.

Peter Cappelli: Yes, I think that's right. The training problem is really a financial problem for employers, and the problem is, Can we make this pay? It's not that we don't know how to train people on the job. As we said a generation ago, all companies used to do that. It's a way of making it pay. We also know how to make it pay. We have apprentice programs, for example, long-standing solution to work-

based skills. And if you look at how law firms operate, if you look at how consulting firms operate, they do have the ability to take bright people right out of college and train them. The way they train them is on the job. You're working with senior people. You're learning as you go along, and that's, you know, how you get ahead. The problem is, in a lot of companies, they're not set up that way, and they can't easily imagine how to turn the jobs and the work into that model. But it's really not that hard to do.

Steven Cherry: You give an example in the book of the Conway freight company...

Peter Cappelli: That company was quite interesting. They had a shortage of drivers, and what they report they did is they set up a training program for the drivers, and as I recall, it's free to the drivers, but you've got to pass the test before they will hire you. So it's free training. You're doing all the training before you become an employee of the company, and it provides a stream of drivers now into Con-way and certainly seems to pay off for them.

Steven Cherry: And do you think that could work in high tech as well?

Peter Cappelli: Yeah, you know, the craziest thing about high tech is the Silicon Valley model, which sort of became dominant in the U.S., replaced the model where IT people used to be groomed and trained from within. And the Silicon Valley model of hiring just in time for what you need came about

largely because they were able to poach talent away from these bigger companies that had spent a lot of time training and developing people.

But now the problems these companies have in Silicon Valley and elsewhere is that it's hard to find those people, and everybody wants the same people at the same time. They keep hoping that the engineering schools will turn out what they want, but it's kind of bizarre if you think about it: if you were, say, a computer company, and you had a product that was all based on this particular chip. You didn't build the chip yourself. You were expecting to buy it on the outside, and your expectation was just that you'll be able, as soon as you're ready, to buy this chip on the outside in the quantity you want at the price you want to pay. You're just expecting the market will kick it up to you, and that's pretty much what happens with labor, right? The software engineers, the systems architects, are often the key component in these companies, expecting to hire them right out of college, and they don't really have much relationships with the colleges, you know. They don't get close to their suppliers; they're just hoping it will come up. If you did that with a chip, your board of directors would probably fire you for terrible risk management, but when it comes to skills and employees, it seems to be kind of a standard practice. Now, you leave the U.S., you don't see that. If you go to India, for example, where the IT companies are booming, those folks are growing all their talent from within.

They're doing it because they have to, but it's not rocket science as to how you can do it.

Steven Cherry: Very good. Well, thanks a lot. It's a great book, and as you said, it's a quick and very easy read. It's about 100 pages, and I read it in an afternoon. So thanks for writing it, and thanks for joining us today.

Peter Cappelli: Thank you.

We've been speaking with management expert Peter Cappelli about his new book, Why Good People Can't Get Jobs: The Skills Gap and What Companies Can Do About It.

For *IEEE Spectrum*'s "Techwise Conversations," I'm Steven Cherry.

This interview was recorded 4 June 2012.

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