Video Transcript
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Women in Technology: The Truth About Math & Science in IT

- **Rachel Reinitz**
- **Lisa Seacat DeLuca**
- **Amy Silberbauer**
- **Ruth Willenborg**

Rachel Reinitz: Math and science are not required for some areas of technology.

They certainly are if you're going to go out and design the next fabulous chip or the algorithms that underlie Watson, but if you're going to create a great website, there's not a lot of mathematics inside of that.

So there's the design aspect, there's UI development, there's cognition of different types that may actually have more of a psychological foundation to it, there's designing great apps, there's working with people.

Not all areas, even of IT, heavily require math and science as one might think.

Certainly many areas do, like data science, but UI development, not so much.

Lisa Seacat DeLuca: That's funny because a lot of companies that you interview with will be really heavy on the algorithms and testing, those kinds of things, well I've been a programmer for ten years and I've never had to really do an algorithm.

There's so much reuse out there now, there's SDKs, there's APIs, if you want to do something you can find someone else who's done it before and then it's the unique way and the problem solving and the logistics and how you approach problems that I think is more important, and doesn't matter so much that you're strong in math, it's more let the math people solve those problems and focus on the logistics or problem solving or the other areas that you're interested in.

Amy Silberbauer: Most recently, IBM started in the last couple years the IBM Design Thinking program.

That doesn't have anything to do with math and science in my opinion.

It is actually a really interesting outside in look at customer behavior.

I'm not a designer so I don't pretend to know what they know, but I imagine that there's actually a lot of psychology in that area and understanding human behavior and their posturing, as much as what they're trying to accomplish with the tools.

I think in the future, there's going to be much more opportunity for that kind of thing and really paying attention to not the bits and bytes and the function that we deliver, but how do customers consume the software.

What do they do with it, how do they behave, how many clicks does it take to get to the end of your lollipop, kind of thing.

I actually think psychology and human behavior is going to play a large role.

Ruth Willenborg: I think it comes back to a little bit what we were discussing earlier about having women on a team.

Having these mixed balances of people are really important, and you start looking at initiatives that every company, and IBM in particular recently with our design thinking, having the people who have visual skills, communication skills.

There's so much more to technology than the bits and bytes of the technology, what's it going to do, who's going to use it, understanding that user community who probably aren't math and science people these days, it's everybody in the world, so having that appreciation of the user community, being able to communicate in English or in whatever language the technology has to be in.

There are opportunities for any type of skill, really, I think to be applied in a useful way.