

Pandemic Perspectives on the Value of Big Data

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Numbers. The stories they tell us are so revealing. The coronavirus crisis is generating a river of data – flowing with everything from evolving economic forecasts to minute-by-minute tallies of coronavirus cases and deaths.

During the launch of *Analytics at Wharton* in 2019, a merging of research, teaching and resources that shows the business school's commitment to the exploding field of analytics, Dean Geoff Garrett said, "In the 21st century, leaders will increasingly use data and analytics to develop insights that will help them make better decisions and become better leaders." Little did he know that analytics would soon become so critical to helping us problem solve during one of the worst business and economic crises of all time.

Hungry for Coronavirus Numbers?
Check out the Penn Wharton Budget Model (*see Related Links*), which uses data to forecast events and simulate economic impacts. Scroll to the bottom of the Budget Model page for data sources that feed the simulator!

Eric Bradlow, Wharton's vice dean of academics, as well as a professor of marketing, joined the Wharton Business Daily show on SiriusXM this week to discuss how analytics are impacting our culture right now. Here – in his own words — are three of his top takeaways:

Calculated risk: "Analytics, statistics, projections, testing, random sampling...these are all crucial to making an informed decision," says Bradlow. "At the end of the day, analytics is a decision-support tool. People who make billion-dollar decisions in industry all the time have to decide what are the risk factors that could make a projection untrue, what are the risk factors that we could end up seeing a larger downside than we're expecting. I believe that analytics is exactly the right decision-support tool to policy makers, to businesses and to us as individuals about the risks that we may be willing to take or not."

Customer intel: Small businesses are "going to have to use analytics to understand that all customers are not created equal," notes Bradlow. "80% of your revenue comes from 20% of your customers. And then the question becomes, which customers? Small businesses are going to be forced to find out very quickly."

Sports statistics: "If sports are going to start, let's take advantage of this data opportunity to understand things better," says Bradlow, a statistician expert who co-hosts the show about sports data on SiriusXM. "Most sports will have no fans or an extraordinarily limited number of fans to start with. We've got 50 years of data with fans in the stands. Now we can look at, well, does a pitcher not get as amped up without fans? We can look at pitch speeds. Does a golfer maybe not hit the ball as far or maybe he doesn't have to worry about hitting the crowd, so he can shoot the shot differently. One of the biggest estimated effects in sports analytics is home-field advantage. Is home field due to rest and being at home or is it due to the fans? Interesting data could emerge from this tragedy that we as analysts will look at for years to come."