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In the absence of a single clear metric to track COVID-19, Instagram co-founders Kevin Systrom and Mike Krieger pulled together a team of engineers, designers and statisticians to create Rt.live. This dashboard focuses exclusively on a single metric: the virus's effective reproduction rate. By displaying the estimated effective reproduction rate for each state, the team hopes to better inform states and communities that are making crucial public health decisions.



## Transcript

- Sure, absolutely.. So, first I'll say, what we're building is not our next company, or at least I don't think it's our next company.. It was a joint project among a handful of passionate engineers, designers, statisticians, to solve the problem that there was no one clear metric that allowed us to understand how things were going.. If you looked at just case counts, how many people have the virus, forget about whether it's state or country or nation, right, if you look at that, it's biased by a bunch of reporting lags and testing volume, so you can't use that easily alone, and it's too complex and there's no comparison between states because some states are larger in terms of population than others, and when we sat down and we said hey, if we were managing a state, or a country, what dashboard would we want to understand how things were going? And that's where it started, it started from how do you manage this situation the best, and what kind of dashboard would I as the CEO of, I guess you're not the CEO, I guess you're mayor, governor, or whatever, president of different municipalities, what dashboard would you need to effectively manage your crisis? And then we set off on this really interesting journey to discover the way to model the data in such a way that takes into account all the biases and all the noise and all the crud that makes all the data feel not right to people right now, and they're I think rightfully skeptical.. How do we take that and put it into a model that corrects for those things, and then shows you what we believe is the truth underlying all of this indirection? And out comes one number, this number called R.. It's the effective reproduction number, so if one person is sick, how many people do they make sick in the course of their illness? It's like the reproduction number, right? If it's one to one, then the infection doesn't spread.. If it's less than one, then the infection goes away.. If it's more than one, it grows exponentially to some limit eventually.. And you wanna get your number below one, so we were like guess what, let's do the simple thing first, let's focus people on a single metric, and that's why we built this site called Rt Live, Rt.live.. And if you go there, you can see for every state the R value that we believe exists today, and we're making improvements and it's interesting and we're learning, and the fun side effect of all this is that Mike and I used to run staff meetings, and now we're debugging JavaScript, and it's super fun..

It's like it's getting back to our roots, and so I'm proud of the work we've done so far, that's the problem we've been solving, and we'll see where it goes...