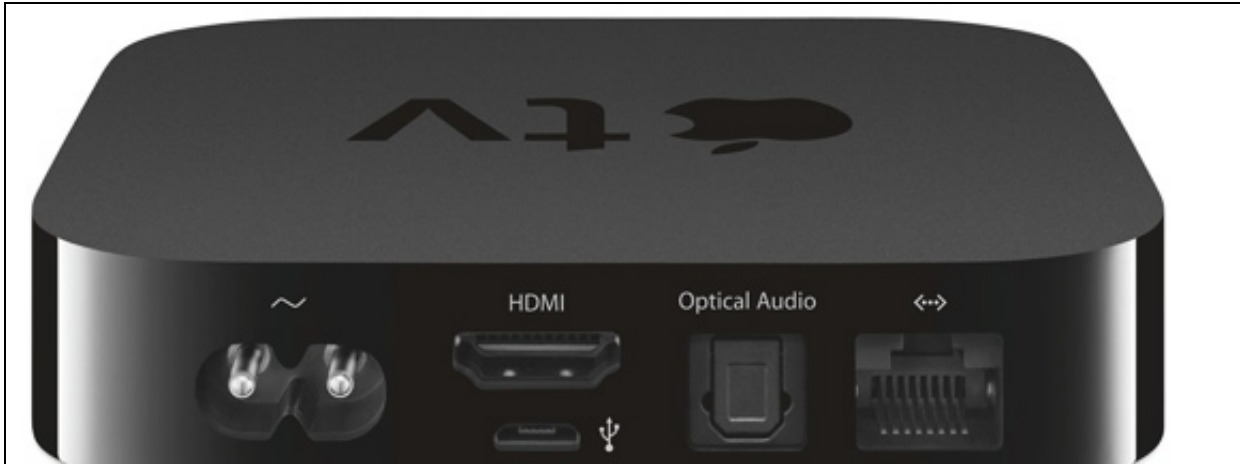


## HBR Blog Network



### Apple's Trojan Horse

by Grant McCracken | 8:00 AM May 13, 2013

Last week Apple's Tim Cook made fleeting reference to "new product categories." Bloomberg West called it "tantalizing" (<http://www.bloomberg.com/video/tim-cook-apple-acknowledges-growth-is-slowing-fPMun1F5RPeNjstoDBvDUQ.html>) ."

There are a couple of candidates in Apple's "big thing" category. One is an iWatch, but I think the one to monitor is the other, Apple TV.

The current Apple TV, as it stands, is a set top box that enables an end-run around the cable companies and lets us pipe movies and TV into our living rooms. But an Apple-produced television has the potential to be so much more.

As I've written in my previous two blog posts, our first inclination ([http://blogs.hbr.org/cs/2013/04/disruption\\_denial.html](http://blogs.hbr.org/cs/2013/04/disruption_denial.html)) is usually to play down the potential impact of a new technology. It's the safe and emotionally comforting ([http://blogs.hbr.org/cs/2013/04/is\\_timex\\_suffering\\_the\\_early\\_stage.html](http://blogs.hbr.org/cs/2013/04/is_timex_suffering_the_early_stage.html)) thing to do. But we should be more future-sighted. Let's imagine, for instance, how Apple TV could change the world.

The new Apple TV will have the form factor of TV but its real and revolutionary purpose will be telecommuting so good it's going to feel like teleportation. The Apple TV will whisk us to work, to school, to conferences, to the city, to Second Life, to our memory palace and virtual library, to shared worlds like Eve and Halo. The Apple TV will be a portal to worlds now accessible only by planes, trains and automobiles. Apple TV will turn our offices and living rooms into portals.

This Apple TV will give us signal from which virtually all noise has been extracted, a "retina display" with so much pixel density that we are no longer feel we're taking transmissions from a distant planet, and, probably, another species. We won't believe our eyes and ears.

The consequences will be something to behold. So let's behold them. At a minimum, this Apple TV could change education, hospitality, work, and travel. It may even change the city. Now that we're done, or nearly done, disintermediating old media like the newspaper, and supply chains like the book store, it's time to solve that vexing problem of having to get ourselves from one place to another. It's expensive, time consuming, fraught with inefficiencies, and punctured by indignities we put up with because we have no choice. (Have you flown lately?) The moment we do have a choice, it's good bye to all that.

Let's think about the travel industry. What should it do to get ready for Apple TV? It might consider taking the advice of NASA's Charles Bolden Jr. who, when asked what we should do if a 50 foot meteor of the kind that hit Russia recently were to strike New York City, said, "Pray ([http://www.cbsnews.com/8301-205\\_162-57575194/nasas-advice-for-near-term-meteor-strike-pray/](http://www.cbsnews.com/8301-205_162-57575194/nasas-advice-for-near-term-meteor-strike-pray/)) ."

The effects could be catastrophic. Direct spending on business travel by domestic and international travelers totaled \$249 billion in 2011. It turns out that roughly \$99 billion of this is spent on meetings and events. Let's say, for the sake of argument, that we will protect this expenditure, because for some events we need to be there in-person to circulate, network, meet new people, and eat with friends we only get to see once a year.

That leaves \$150 billion on the table. Let's be really optimistic and suppose that \$100 billion survives, at least in the short term, out of inertia, and because there will always be moments when McKinsey must meet with clients face to face. Let's say the Apple innovation merely takes \$50 billion out of the industry. Ooph! This must mean the death of several airlines, the loss of thousands of hotels and restaurants, the disappearance of millions of tax dollars, and the dissipation of nearly a half million jobs (assuming that we are going to lose 20% of the 2.2 million people who now work in the industry. [PDF ([http://www.ustravel.org/sites/default/files/page/2009/09/US\\_Travel\\_Answer\\_Sheet\\_Jan2013.pdf](http://www.ustravel.org/sites/default/files/page/2009/09/US_Travel_Answer_Sheet_Jan2013.pdf)) ])

We can recover tax dollars through the reform of education. Jobs will not be replaced and these workers will likely join the permanently displaced people identified recently by Brynjolfsson and McAfee ([http://www.amazon.com/Race-Against-Machine-Accelerating-Productivity/dp/0984725113/ref=la\\_B002A51606\\_1\\_1](http://www.amazon.com/Race-Against-Machine-Accelerating-Productivity/dp/0984725113/ref=la_B002A51606_1_1)) . The real damage comes to airlines and hotel chains, the former never robust at the best of times. I have written admiringly (<http://www.amazon.com/Chief-Culture-Officer-Breathing-Corporation/dp/0465018327>) of Richard Anderson at Delta. But even great management cannot protect these airlines. While we are imagining college campuses littered with tumble weeds, think of an airport that looks like a mall down on its luck, underfunded, understaffed and struggling to keep up its former grandeur.

There are three questions here. Will this new tech happen? How fast will it happen? What will it mean when it happens?

Will it happen? It will. Perhaps not as an Apple TV, or perhaps not as the innovation that Cook was hinting at for Q3 this year. But this is not a "wild card (<http://hbr.org/2007/07/six-rules-for-effective-forecasting/ar/1>)" — something too large to ignore but so improbable that it is not worth thinking about. Telepresence will happen. And if it were being driven by someone other than Cisco and HP, it would have happened by now.

We wouldn't dream of going backwards on any of the new technologies, from a laptop to a typewriter, from a mobile phone to a rotary one, from email to an answering machine. Once we have traveled by Apple TV, we won't go back. Put it this way. We'll be able to get to Singapore by turning on our Apple TV — no walking to the special web-presence-enabled room powered by Cisco, even. Or would you rather take an hour to plan the trip, an hour to get to the airport, two hours to wait there, 22 hours of flight time, an hour to get through customs, an hour to get to the hotel, and then, for our trouble, a case of jet lag so vicious all we want to do is crawl into a corner of the boardroom and pass out?

Since when did the corporation care about our jet lag? Wait until someone puts together the numbers: \$8,000 for the business ticket to Singapore, \$1000 for room and board, another \$1000 for this, that and the other thing. Multiply this by 8 trips a year times 60 consultants and even a very expensive telepresence system starts to pay for itself in almost no time.

How fast will it happen? Pretty darn. (Rough estimate.) To be sure, it's a tipping point calculation. No one wants telepresence until everyone has to have it. What is called for is someone with deep pockets and marketing savvy. Enter Apple the company with \$137 billion in cash reserves and a genius for making us need things we already have. Once Apple is in on the game, the future is no longer, in William Gibson's phrase, "just not very evenly distributed." It's sitting in our den.)

What will it mean, more broadly? This is the tough question. We are capable of grasping the change as a literal shift in technology and even as a shift in the way we travel. We are less good at seeing the unintended consequences. Now we are up against our very human inclination to suppose parts of the world are somehow immune from change. This is simultaneously a failure of the intellect and the imagination, and it is a point of great vulnerability.

We can't see some dangers, not because they are invisible, but because they so resist the status quo and our experience of the world that they are difficult to think about. Let's look for a moment more about the implications of Apple TV. It's not so hard to imagine a college campus that stands empty, depopulated by Apple TV-powered MOOCs. It's a little harder but still possible to imagine an airport fallen on hard times. But when it comes to seeing the implication of Apple TV for the city, well, that's hard. I mean, cities are a kind of geographical boilerplate. We presume their existence. They are the great machines of human existence. They are the way we got to the present day. But they don't have to exist. There are facts and there are "accomplished facts." These latter are so manifest and material that we come to believe, without thinking about it, that they are not just true of the moment but true of the world.

What happens when someone works out that the corporation only needs about half its current footprint in Manhattan (now that is that everyone can work from home half the week)? Multiply this by even a third of the corporations and there's trouble in New York City. Throw in a diminished hospitality industry (hotels and restaurants), a mayor or two without Bloomberg's managerial chops, and a return to the 1970s is not unthinkable. The '70s were a terrible time when "mean streets" drove the flight of corporations which narrowed the tax base which diminished both social programs and police forces which made streets even meaner, and the cycle began again. It was a fall so precipitous some began to talk of the city's "irreversible decline." But even if it isn't the 1970s all over again ([http://en.wikipedia.org/wiki/History\\_of\\_New\\_York\\_City\\_\(1946-1977\)](http://en.wikipedia.org/wiki/History_of_New_York_City_(1946-1977))), Manhattan would become a shadow of its former self.

As we prepare for Apple TV, this is not the time to be ruled by our assumptions. There is nothing necessary about a city. It's like the book, shaped by technological requirements, historical accidents, and several critical paths. It doesn't have to look like this. Like the book, it doesn't have to exist at all. As Nicholas Negroponte told us in *Being Digital* ([http://www.amazon.com/Being-Digital-Nicholas-Negroponte/dp/0679762906/ref=sr\\_1\\_1](http://www.amazon.com/Being-Digital-Nicholas-Negroponte/dp/0679762906/ref=sr_1_1)), one of the structural effects of the digital revolution is the distribution of things once centralized. The city may merely be one of these.

Apple has made a practice of producing Black Swans the way some people farm Ostriches. (Hard at first, then increasingly routine.) We need to get better at spotting and tracking swans.

Apple TV could make the early days of our digital transformation look mere. Yes, we digitized the analog. Yes, we disintermediated the channels of culture, communication, and distribution. And yes, we changed the economics of, um, economics. But the reformation of education and the transformation of the city, these may be still more spectacular. Apple TV may not come this fall. It may not come finally from Apple. But in some form, from someone, it must come eventually. Look for a Trojan horse in your living room and on your desktop.