



## Stanford eCorner

### Internet of Everything

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Video URL: <http://ecorner.stanford.edu/videos/3189/Internet-of-Everything>

Cisco Chief Technology and Strategy Officer Padmasree Warrior reviews the first three phases of the Internet: access and connectivity, commerce growth, and the rise of social, and then discusses the transition into the Internet of Things that will present massive markets in solving what to do with the data created by people and machines.



#### Transcript

We see the next wave of the internet being what we call the internet of everything. And so what do we mean by internet of everything? So if you kind of think about the internet, roughly you can categorize the life of the internet to have four phases. The first phase of the internet was all about access and connectivity, right? So Cisco and others created a way to aggregate or abstract away different protocols that existed and we created a wave of having a multi-protocol router. That was sort of the beginning of commercial internet as we know it. So from that time, connectivity was what we focused on. Access, digital access was the big opportunity and I would say email was probably the killer app in that first phase of the internet. The second phase of the internet was when we started digitizing commerce and so more and more business transactions, how we consumed applications, how we paid for different things was all done digitally and that kind of gave rise to ecommerce and we saw new companies emerge in that space and retail. And in the beginning - you know maybe some of you are too young to remember this - in the beginning people were really nervous to enter their credit card numbers on the internet or put them on a computer and today we don't think about - twice about using our cell phones to pay for things and buy things, right? So the second wave is really about the rise of the ecommerce and digitization of business transactions. The third wave, we started looking at digital interactions and that was the rise of the social. So that I would say was probably the last five to seven years or so.

You know now words like friending, liking; these things are all very new words that actually the Oxford English dictionary is entering into changing in the English language use of some of these words. So the next phase, which we believe will be the fourth phase of the internet, is what we call the internet of things. So internet of things is really about not just machine to machine connectivity or sensor networks but it's actually what do you do with that data and how do you use the power that we are creating in machines to enable us to have a better lifestyle, better healthcare, better education systems, better manufacturing productivity. So the reason we refer to it as the internet of everything is the way we define internet of everything is really about connecting people, process data and things. How do we connect all of these? And we estimate that transition in the next wave to be roughly \$14 trillion of value. There is potential for us to unlock that value. So that doesn't mean that it's a total available market. That means there is new revenue opportunity as well as new profit pools that we could unlock through this internet of everything.