

URL: <https://stv.stanford.edu/clips/changing-process-of-innovation>

Cisco Chief Technology and Strategy Officer Padmasree Warrior explains how the process of innovation has changed over the past few centuries, from the era of the sole inventor, through the rise of corporate labs, to the modern period of open innovation. Warrior also notes the important challenge of working across domains to maximize innovation potential.



## Transcript

And so if you kind of look at the history of innovation, in the early days, very early days we had the era of the solitary genius as I call it, right, and we had famous inventors who invented paper, printing press, light bulbs and we talk about these people to this day, we use their inventions and so that was an era where we had a person or an individual really dedicating their life to invent something and came up with a big invention that changed all our lives.. So that's sort of from - we went from that model where we were focused around inventions to really about applying those inventions which led to the industry of evolution.. It was more about applying those concepts to change manufacturing and change production of energy and so forth.. From there we went to companies creating labs and so this was the era of Bell Labs and Xerox, Park and so forth where there were researchers whose job was - it was to innovate and everybody else didn't need to innovate or be creative.. And so we kind of separated innovation into being a function and we trained people to innovate in the labs and everyone else was supposedly going to go run that business.. And that worked well for a number of years.. Labs produced lots of patents and intellectual properties and that was the era that continued for a while and then we shifted again, we said no, innovation actually can occur anywhere.. Really going to be more about open models of innovation and actually Cisco participated in this model also.. We have something called iprice, and izeone where we post problems that we think are interesting for innovators to solve and we source ideas from everyone around the globe and we select ideas that we think are interesting and we fund them with no strings attached.. You know there isn't any direct benefit necessarily to Cisco, we just feel actually the industry and therefore Cisco will benefit in this model..

So we kind of went through that model of integration.. It's changing again and I think it's changing again in the following ways and we're seeing the early signs of this.. It's changing again to become much more of a multi domain innovation.. What do I mean by that? If you kind of think about the most innovative companies today, right? The most innovative companies today combine creativity between hardware, software, user experience, industry or design, UI design, so it is more than just having a technical innovation or a technical invention, it's really about crossing different domains and creating ultimately a better experience for the user or for the business.. It's very complex to implement because you know no one can really be an expert in all these things.. So when we say we want to create an innovation project, whether it's a small company or a big company, the ability to really bring together these different skills is really important.. So that's something we are looking for as a company when we look for ideas and we look for opportunities for people to come work with us; we look for people that can actually cross their domains and cross multiple domains to innovate.. You don't have to be an expert in everything but you should be able to interface.. If you are hardware designer you have to really understand how the software integrates with that and how that's delivered for usability and user experience.. So there is two slightly different things...