

Posted to the Gilder forum - June 13, 2001

Telecosm Crosses the Chasm

In his marketing books, [Crossing the Chasm](#) and [Inside the Tornado](#), Geoffrey Moore uses the Technology Adoption Life Cycle (TALC) to describe how high technology products move from garage to market. He calls TALC "a model for understanding the acceptance of new products." In [The Gorilla Game](#), he tells investors how to use TALC to help identify the winners -- the gorillas -- and how to use TALC to time the investments.

According to TALC, people fall into one of five categories when it comes to accepting new products:

Innovators are people who like technology for technology's sake. They seek out the newest products, and they are willing to use them even before they are officially released to the market. In the Microcosm they include the beta testers and the hackers. Companies often "seed" the innovators with free equipment.

Early Adopters also buy new products early, not for the thrill of using new technology but because they feel that the new technology will give them and their companies a head start over the rest of the world. Early adopters rely on the innovators' opinions to make the purchasing decision.

Early Majority also relate well to new technology but they don't necessarily want to be the first kid on the block to try a new toy. The "**Chasm**" refers to the time lag between the early adopters and the early majority taking up the product. The early adopters are on the lookout for new products while the early majority has to be sold. If this sales effort is successful, it creates the **Tornado** because, once a certain percentage of early majority buys the product, they all want to buy it. The early majority cannot stand to be left behind.

Late Majority starts to buy when the product is well established., typically when the product has penetrated roughly 50% of the market (you can't lose your job by buying Windoze).

Laggards don't want to buy technology, period. They buy when they have no other choice.

Another important idea that More puts forward is "**The Whole Product.**" If you are the only person in the world with a FAX machine, it's of no use to you. Once enough people have FAX machines and access to a telephone line, then the utility of the FAX becomes evident. The whole product is the FAX machine plus the telephone system. If you have a car but there are no roads in your vicinity and no gas pumps and no mechanics, then the car is not useful to you except as a conversation piece. The whole product includes the car, the roads and all the services like gas pumps, oil companies, mechanics, spare parts, driving schools and traffic lights.

There are many road blocks on the way to selling new high technology products. First some people tinker in a garage and come up with a product idea which they show off at their local club. If the idea seems good they get some financing and actually create a product. The Innovators are eager to get their hands on these new gadgets but often they don't have the money to buy them so the company "seeds" them with beta product. As soon as the Early Adopters hear about the new gadget they try to figure out if it will give their companies a lead and often they will buy the product and they are willing to put up with the extra hardship that new, untested, products bring with them. So far so good. The next big hurdle is to convince the Early Majority to buy the product. Here the problem is Catch 22. The Early Majority likes to buy products that other members of the Early Majority have already bought. The **Crossing the Chasm** that More refers to is the jump that needs to be made between Early Adopters and the first lot of Early Majority. He recommends the **Bowling Alley** approach to marketing in the hope that this will unleash a **Tornado**. When that happens, the company has to change its marketing strategy once more to fit it to the current circumstances.

I wonder if we can adapt some of these ideas to the Telecoms as a whole?

Could we say that the bubble was the action of the **Innovators** and the **Early Adopters** and that now the Telecoms is trying to **Cross the Chasm** to reach the **Tornado**? If you believe the majority of the analysts, the Tornado is over and the most wind we will ever again get is a soft breeze. This has to be wrong. What percentage of the total market has adopted 3G cellular? What percentage of the total market has access to broadband? If the answer is less than 15%, then we have not Crossed the Chasm and the great opportunities of the Telecoms still lie

ahead.

But it is important to remember another important lesson from The Gorilla Game: you should not buy the potential hardware gorillas until they emerge as winners from the Tornado and you should buy the various software gorilla candidates during the Bowling Alley selling the losers when you figure out which ones won and which ones lost.

Obviously, not all the Telecosmic games are going to play out at the same time. The fiber game is on right now and the 3G cellular game is in the near future, parts of it anyway. I think we can declare Global Crossing the winner of the transoceanic Tornado -- not a gorilla but a king because it is in a commodity business. On land, my candidate is Metromedia Fiber but it's still too early to tell. In the wireless business I think we can point out two gorillas, Qualcomm as owner of CDMA and ARM Holdings as owner of the ARM processor cores.

Then there is software. The number of candidates is quite large and, up to now, only a few are gorilla candidates. My two favorite ones are Micromuse and Portal Software with Checkpoint and BEAS right behind. Actually, Amdocs is also a good candidate and larger than Portal but it has a different customer base so its in a different category of gorilla.

I have omitted all the optical component makers because I don't think you will find gorillas there, maybe some kings. But the kings will not become evident until the market for optical components settles down, or rather, newly enters a tornado.

Well, have a happy weekend. It's highly likely that you won't hear from me for a few days.

Denny

"Demand creates queues. Supply gets rid of them."

[Software Times](#)