

Exponential Versus Linear! Don't miss the growth curve!

In a research report published by CTIA Wireless, there were 327.6 million data-capable wireless devices for 315.5 (est.) million residents in the U.S. Of this number, 96 million were smartphones and 15.2 million were tablet computers.

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The report was compiled and finalized before the holidays and before the latest iPhones or iPads came out. The Consumer Electronic Association reported that during 2011, 28 million tablet computers were sold, but just last month, Apple reported that it had sold over three million iPads in the first weekend the tablet was available in stores (March 16th).

The words that I use to describe this rate of growth are: astounding and phenomenal! Nobody saw this type of growth coming and current figures would indicate that this growth will continue unabated. Why?

Gordon Moore (co-founder of Intel) had it right when he predicted back in 1959 that computer power would double every two years. The devices that are flying off of the technology shelves today have the power that Moore predicted and more!

Tablets and smartphones represent the new generation of technology utility and mobility. They are powerful, wireless and really easy to use. The market has clearly established these devices as the de facto platforms for videos, e-books and just about any APP you can imagine. There is, however, a consequence of this power that few saw coming.

The explosive growth of these devices has placed an unforeseen demand on existing infrastructure. Be it WiFi, WiMax, 3G or 4G, the installed infrastructure did not anticipate the rapid growth. Networks are bogging down and cell providers are beginning to increase rates and limit data use.

The reason why is simple. Traditional technology planning is linear and based on prior growth. It is a retrospective process that looks back and then adds increases forward (i.e. a budgeted 3 % increase in technology spending year over year). Seldom does technology planning consider the change in device power and bandwidth of the devices moving to the market: ergo tablets, smartphones and wireless connectivity.

The result is an exponential increase in demand of perhaps 200-300%, which quickly overwhelms the 3% annual technology budget. The result is a rapid decline in overall network performance and a directly proportional increase in user frustration. Complaints emerge no matter where you go, about slow network speed. From airports, hotels, and yes, even your financial institution there is deterioration in performance and customers are complaining. More importantly, users (like me) that have upgraded to 4G systems are bogging down, too, and these are supposed to be faster systems. A frustrating syndrome that can be relieved if planned for using vision.

The solution, apply the Moore's rule to your technology planning. Take a look ahead, from the user back to the institution and apply an exponential, not a linear, overlay to your future growth. Develop a capacity consumption plan analyzing current and future product developments relative to your current structure. Network infrastructure, and servers, should not be your only focus. Ask yourself the question, what technology are our customer's using or going to use? What are their trends?

A plan that is predicated on a straight line will quickly miss the growth curve.

The Wombat! About the Author

Dan Fisher is president and CEO of The Copper River Group, a consulting firm headquartered in Fargo, N. D., that focuses on technology and payment systems research and consulting for community financial institutions. For nearly 30 years, Fisher has worked in the financial industry using technology to improve the bottom line. He was CIO of Community First Bankshares (now part of BancWest), has served as a director of the Federal Reserve Board of Minneapolis, the chairman of the American Bankers Association Payment Systems Committee, and was a member of the Independent Community Bankers of America Payments Committee. Fisher has written numerous articles on banking technology and the payments system. He has authored or co-authored six books and recently published a book titled, "Capturing Your Customer! The New Technology of Remote Deposit." You can contact Fisher at dan@copperrivergroup.com.

P.S. To understand Dan's nickname, check out "About the Wombat" on his website, www.copperrivergroup.com