

Fiber Optic Services And Products



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FTTD: A STRATEGY FOR ACCELERATION

EXECUTIVE SUMMARY

The prognosis for future use of FTTD is not positive or encouraging. I present the reasons for this view and changes that can address the conditions that will lead to decreased market share of FTTD. These changes can be implemented by the Fiber Optic LAN Section of the TIA or by another organization that chooses to address the challenge, and business opportunity presented by FTTD. All changes require the element of acceleration.

If no significant changes occur, I believe that fiber to the desk will miss the boat; i.e., fiber to the desk will have a minor role in the future of the data communications industry.

Of significant importance is the development of tri-speed fiber silicon. Without such development, the fiber to the desk market is doomed to second place due to lack of parity with the capabilities of UTP silicon.

Businesses and organizations either grow or stagnate. Stagnation leads to deterioration and eventually, to a slow death. Without change focused on accelerated growth, death is inevitable. I would hate to see FTTD, with its significant potential, die.

INTRODUCTION

During the last six months, I found myself considering the FOLS and its potential future. These considerations take the form of projections of the status of the FOLS in two years. None of my musings were pretty.

I asked myself four questions:

Will the FOLS make significant progress?

In what areas will the FOLS make significant progress?

How will we measure such progress?

If progress is not significant, what should be done to achieve significant progress?

ANSWERS TO FOUR QUESTIONS

Will the FOLS make significant progress?

Unlikely. I am not saying that the FOLS will make no progress, but that the progress will not be significant enough to result in continuous growth for 5-10 years thereafter.

There are four reasons for this prediction:

time,

wireless,

funding level,

time, and

commitment.

Time and wireless are somewhat related. I believe that there is a horizon on the FTDD opportunity. In wireless, both UTP and FTDD have a strong challenger. From the history of FTDD, we know that low life cycle cost and high bandwidth are not motivators strong enough to drive network decision makers to FTDD. Since this is the case, wireless looks like a strong competing technology: it offers convenience, relatively low cost and relatively low bandwidth.^[1] If FTDD does not make significant progress in the next two years, wireless will have accumulated a large base. With a large base, network designers will have three choices: UTP, with which they are comfortable; wireless, which offers convenience and mobility; and FTDD, which can offer them low cost relative to UTP. Regretfully, I suspect that the convenience of wireless will outweigh the low cost of FTDD.

Funding of the FOLS is minimal, high restricted and significantly less the levels that other industry associations have. Because of restrictive funding, the accomplishments will be severely restricted.

I mean no offense to the FOLS members or to those who have invested significant time and effort on behalf of the FOLS. In addition, I believe that the FOLS has made extremely good use of the funding available.

The fundamental reality is that successful industry alliances and organizations^[2] are funded to 10 and 20 times the level at which the FOLS is funded. How can the FOLS expect to be significantly successful with minimal funding? With all the factors^[3] arrayed against FTDD, I would be foolish to expect significant results from minimal funding.

Time from members has been limited. Pearson Technologies is no exception. During the Gartner assault, I spent 10-15 hours per week. And that was not enough to accomplish the ideal goal. It seems that most of the work is done by a very few people.

In addition, response to actions and to requests for response has been extremely slow.

I acknowledge that the FOLS is a volunteer organization. Such limitations are usual for a volunteer organization.^[4] However, the limited horizon (two years) and the significance of failure to make significant progress seem incompatible with the reality of a volunteer organization.

In what areas will the FOLS make progress?

The cost model is progress. The web casts indicate some progress. But I was disappointed by attendance at both. This low attendance may be reflective of the lack of interest in fiber to the desk. If so, low attendance indicates resistance and/or ambivalence to FTTH. There must be tens of thousands of network decision makers in North America. We should be able to attract more attention.

The tri speed fiber standard would represent significant progress if, and only if, the industry responds with products at effective prices. I make this statement based on the 100BASE-SX standard: products are available, but at a cost higher than competing 100BASEF products.^[5] Unfortunately, the tri speed product development does not seem likely.

How will we measure such progress?

This is the most important question for the future viability of the FOLS. Two years from now, the FOLS will be looking for funding. The question that potential members will ask is: what have you done in the last two years with the funding you received?

How will we answer this question? We will point to actions taken. We may be able to quantify progress. However, no answer that includes the phrase we could have done more with additional funding will result in significant additional funding. Whatever we do now, and in the next two years, must result in acceleration in the use of fiber.

This is part of the answer to measurement of progress: we must create a measurable acceleration in the use of FTTH and in other uses of fiber. I do not believe or expect that this acceleration will come from the relatively passive^[6] plan we have. Our low funding precludes a more active plan.

My view of reality is that the people we need to reach are not interested in our message. The people we can reach are not the people, whose opinions and knowledge we need to change. A passive approach, necessitated by low funding, will not reach those people we need most to reach to create acceleration.

I have read the plans for 2004. The plan is a good plan for the funding available. The question in my mind has been: will the FOLS actions be sufficient to make significant progress?

I look to other industry organizations and alliances for guidance. The 10Gigabit Alliance has achieved its goals and disbanded.^[7] The FTTH Council holds an annual conference to present case histories and information on the types of products that can be used in such networks. All such alliances have a much larger presence than does the FOLS. All such alliances have made active presentations, including conferences, a part of their plans.

SUGGESTED ACTIONS

If progress is not significant, what should be done to achieve significant progress?

Acceleration is the key goal. Whatever the FOLS does, the activity must show quantifiable acceleration. The web site statistics should enable the FOLS to show acceleration. Future web casts should show acceleration.

But significant and long-term acceleration requires increased funding. And increased funding requires a plan different from the current plan. We have a chicken and egg situation: which came first, the acceleration in progress or the increased funding?

Regretfully, I was unable to attend the December meeting, as a client engaged me. At that meeting, I had intended to raise the issues in this letter.

In another sense, it is fortunate that I did not attend, as I now have a more clear view of what the FOLS needs.

Plan and implement all activities so that results are measurable. Plan all activities to result in acceleration.

Create a plan for increased funding. What results would be possible with an annual budget of \$500,000? What results would be possible with an annual budget of \$1,000,000. Start thinking outside the box of current funding level.

Create a supporting argument for increased funding. Such funding will not fall into our laps. How can we justify the ROI for such a level in funding?

Think about establishing a permanent staff, as other alliances have. This staff will be responsible for day-to-day activities.

Think about the companies that would benefit most from a significant increase in FTTH. What arguments would motivate them to support the FOLS at an increased funding level?

What companies should, but are not, supporting the FOLS? These companies would benefit from increased FTTH.

Think about an annual conference along the lines of the FTTH Council conference. As an alternative, consider regional conferences to attract network decision makers. At such a conference or regional conferences, the presentations would focus on the cost reality of FTTH.

Generate funding sufficient for the development of Tri-Speed fiber silicon and the appropriate standard, complete with auto negotiation. A Tri Speed standard will put fiber on equal footing with UTP. Without such a standard, fiber, and FTTH, will never have equal footing. FTTH will be relegated to media conversion, which is not a cost efficient method for an FTTH network.

My opinion is that this development will not occur under current conditions. There does not appear to be enough support for a single company to fund such development. According to G. Cawley (OPTEK), the estimate for such development is \$150-\$200 k. It would be possible for an industry alliance to fund such development with an annual membership fee of roughly the same as the membership fee other industry organizations and associations.^[8] 20 members at \$16,000/year, typical of such associations, creates \$320,000 in one year. This amount is enough to fund tri-speed development.

Before anyone funds this development, we should obtain an estimate of the cost of a tri-speed fiber port. With this estimate, use the cost model to determine whether the estimated price still favors FTTH.

Think about at least two levels of membership: a higher cost membership that does not include dedication of a percentage of time of one person to FOLS activities; and a lower cost membership with such a commitment.

CONCLUSIONS

I believe that fiber to the desk is, and has been for several years, at a cusp: either FTTH use will increase significantly or its market share will drop. I suspect that the window of opportunity is no more than two years. Without any change in current conditions, I believe that FTTH will become obsolete and ignored, except in those applications that require its unique advantages, such as long distance transmission, secure communications or EMI and RFI immunity. The opportunity to dominate the network market may well be past. Unless..

we take some action to change the current conditions.

Respectfully submitted for your consideration,



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Pearson Technologies Web Sites

<http://www.ptnowire.com>

<http://www.FTTDnow.info>

<http://www.fiberopticlawsuits.info>

<http://www.sfoi.info>

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^[1] A present maximum of 54 Mbps shared bandwidth.

^[2] E.g., Gigabit Alliance, 10 Gigabit alliance, FTTH Council

^[3] E.g., mass perception as expensive, UTP industry half-truths, weak fiber optic industry support, wireless, and lack of support from major switch manufacturers.

^[4] Pearson Technologies is a supporter of the FOA. At times, the progress of the Fiber Optic Association is frustratingly slow due to its volunteer nature.

[\[5\]](#) I purchased 100BASEF media converters for our fiber optic network at a price below that of 100BASE-SX converters.

[\[6\]](#) By passive, I mean creating materials that interested individuals can access.

[\[7\]](#) From its website: The 10 Gigabit Ethernet Alliance (10GEA), a not for profit company incorporated in the State of California which supported the combined activities of its member companies, has now been legally dissolved.

[\[8\]](#) I do not know the name of this association.