

Why can't we all just get along?

The ITS industry is notorious for exclusionary 'either/or' type thinking where one answer has to be correct at the expense of another.

One of my mentors always said at the core of every challenge there is an opportunity. Too often in the modern world a lot of time is spent focusing on the negative, on why things cannot get done, what roadblocks are in our way.

Look at the modern political landscape if you need a current example where far more time is spent on attack ads or finger pointing rather than come up with solutions. Wouldn't it be far more beneficial, productive and down right pleasant to work on solutions? There is a way we can do it, if we stay focused on our goals.

In the ITS industry we often are confronted with exclusionary 'either/or' type thinking where one answer has to be correct at the expense of another. However we can probably better serve our clients needs if we take an inclusive or open type of approach. Let's explore the options in front of us and look at all the features, benefits and capabilities of each in order to truly pick best of breed solutions.

The most obvious example is the choice of media for an infrastructure. Should you use copper, fiber or air?

Why does it have to be an 'or'?

Why can't it be ... Where do I want to use copper, fiber and air?

Let's look at what makes them good choices.

Copper, can provide low cost, high speed links to fixed data points of up to 10Gb/s for up to 100 m channels as well as power to PoE enabled devices such as IP phones and WLAN access points. Fiber will provide very-high speed links to fixed data points of 10Gb/s or more and can address channel length requirements greater than 100 m as well as equipment to equipment links in the backbone.

Air (WLAN) is the only media that can provide mobility or portability, and with the newest standards such as 802.11n (draft), at high data rates. Wireless is the perfect compliment to a wired network as it can go where cable cannot

Take the example of designing a telecommunications infrastructure for a hospital.

First look at the capabilities, and strengths of the media types and how they might be suited to meeting their business need, namely delivering clinical care.

Then look at the applications and types of users that need to be addressed. Bed-side patient services obviously need mobility and portability. Should we waste time looking at which media types do not address the needs or focus on those that do? Going down the list of requirements for the facility matching needs to strengths will

provide an obvious matrix of a total solutions package.

It sounds obvious, but we should also realize there are differences between types of projects, clients and facilities. So even though we figured out the right solution for our hospital, let's not assume that the same metrics hold true all of the time.

There is not only one right answer for the options and potential combinations are limitless. Petro-chemical facilities, universities or commercial buildings are all different not just from a usage standpoint, but also construction techniques, environmental effects and user type.

In a petro-chemical facility, for example, we can use a mixture of standard commercial grade (cable, connectivity, electronics etc) and hardened/industrial grade products. Depending on the facility requirements we can go from improved moisture and dust resistant offerings to the truly Uber-Rugged type demanded in some areas (including oil/chemical, submersion, extreme temperatures etc.).

We have used the example of basic media and facility types, but there are more options that we should explore as well.

For example with WLAN technologies and media, what mix of delivery should we use with all of the great options out there such as 802.11 a/b/g and n, mesh and point-to-point bridging?

All have strong points that should be aligned with the needs of the user. For industrial premises do you want to choose between existing legacy topologies and risk premature obsolescence? Alternatively, you may want to use standards based solutions that can be configured in bus, ring, mesh and star topologies at the press of a button to help future-proof that investment.

If we look at all the options, their costs, benefits, strengths and how they meet the client's needs and business goals — the right options become immediately apparent, easy to justify, quantify and most importantly move forward on.

It sounds pretty simple, and it is, almost like 'un-common' sense. We all can get along ... and so can mixed media ... in fact it might be the best of all possible solutions.

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