

Technical Corner

Home Sweet Home

I have shied away from the discussion of Home Automation for some time but in this issue of the LONMARK magazine, we have articles focusing on LONMARK International's role in the easily installed and managed home. Therefore, in keeping with the theme, I revisit a topic that has always been of personal interest to me.

I never had the fear that technology would take over our lives as it had in Ray Bradbury's *The Veldt*. Reading that story as a child, it was not the precursor to the holographic deck of the Trekkies that caught my interest but rather, reading about the lights popping on as you enter a room and them fading-out softly as you make egress. Likewise, I found the voice of HAL 9000 to be rather comforting in Stanley Kubrick's *2001* – the household omniscient omnipotent, overseeing my ever-flooding sump pump while I am sleeping or away.

So as I sit in my rather un-automated home, I ponder why: Why has the reality of automation not lived up to its promise? We all know that it is certainly not because it cannot. The technology is here – it has been here – many people have automated their homes: from lighting to audio systems; from security systems to drapes and blinds, et cetera, et cetera, ad infinitum. So why not everyone? Cost not being factored (since costs are constantly dropping for all types of technologies), what are people's reservations? Why don't they want it – even if it were for free?

Technically, we need a self-installing network, so I encourage you to take a look at the "Introduction to

the Interoperable Self-installation (ISI) Protocol" article about how to make these proposed networks install themselves.

Additionally, we should take a look at the differences between what each generation needs and wants – covered in the "Come Home – Why Now for Smart Homes?" article.

While both of these are solutions to driving the industry (enabling devices to communicate and creating an interface to the system), I want to look at the industry from a slightly different angle: the obstacles. It is my belief that we need to conquer three major obstacles: the fear of losing control, selective privacy, and the "why."

First is the fear of losing control: I am not the only one on whom *The Veldt* and *A Space Odyssey* had an effect. Everyone who had read those stories (or viewed them) took away something different. For me it was the luminaries and their touchless convenience. For others it may have been the voracious lions and spoiled children. For me it was the consolation that something was looking after the abode. For others it may have been the eeriness that something was looking after the abode. So the Orwellian doomsday/invasion of one's privacy and space must be laid to rest if automation of the home will find success with the masses. The term "automation" itself implies a lack of personal control over one's environment. It must be stressed that the technology is not in place to remove the power of the individual but rather to empower the individual through greater choices and fewer needless deliberations.

Staying with the literary themes (and the theme of fear), there is a voyeuristic "1984" bent to increased automation in the home. While people may freely share their opinions by writing to a newspaper, speaking their mind at a town meeting, or jotting a post to a blog; those same people might rather you not know what they are watching on television, what they grabbed from the fridge, or how well they rinsed their dishes before putting them in the dishwasher. Why? Perhaps a better question is, "why not?" Why

not keep things private? Why must everything be in the public eye? Why must all marketing be tailored to what someone else believes I want – simply because they watched a few of my patterns, observing me, analyzing me – like Big Brother? Am I not a more complex person than that? My interests are extremely varied. And as such, can't I keep those interests to myself? It is this notion of selective privacy that must be respected when automating the home is considered – what on the Internet is often known as "opting in."

The third – and perhaps the most important, as we move into a generation that no longer has fear of any technology – is the "why." Why do I need it? Or moreover, why is it being sold to me? In what way will it make my life better? The generations today ask, "is it just something more to learn?" But tomorrow's generation is asking, "how cool will it be to show off?" – or are they asking that? In other words, is it automation that we want to sell, or integration? Do people want their home to do things for them, or do they want a 2000-key remote that they can strap over their shoulders like a backpack to control everything they want from the comfort of their chair? Over the years, I have posed a simple scenario to many different people:

It is Monday morning and you are getting ready for work. As Monday's can be hectic, you forgot to turn the burner off on the range/stovetop after cooking eggs. You jump in your car and are half way to work when it dawns on you that you "may" have left the burner on.

And I ask, "what would you like to do in this case, if your home was fully automated?" Nine out of 10 people tell me, "I would like to be able to shut off the burner from my mobile phone; or if I had made it to work: from the Internet." Is this automation? No, this is integration. Your mobile phone allows you to send a message to-or-through your home gateway to your stovetop. These pieces are integrated but make no mistake about it: they are not automated. →

So they are posed with a follow-up question (which I am sure you knew I was going to do): “What if it does not dawn on you that you may have left the burner on?”

Invariably I would receive some variation of the “hmm,” for it is a bit much to ask people what they would do if they did not remember to remember. But that is the whole idea of automation. The “home” becomes the housekeeper. There is no need to remember. The “home” realizes that it is a Monday, and consulting your calendar knows that it is not a holiday. It knows it is after 09:00 and you work in an office. The security/fire system has already noted that everyone has left the home. It also knows that your car is gone, and has locked the doors and set the alarm accordingly – since you failed to remember this morning. The stovetop’s safety system periodically checks with the security system to see if anyone is home. Having been told that everyone is gone, the doors are locked, and the home alarm is set, the stovetop makes an executive decision to shut itself off. As a courtesy, it reports its action to your home gateway, which compiles a list of the things you forgot this morning and sends you e-mail at work, reminding you why you bought all the advanced products that you did – just in case you don’t remember.

“Is your home automated?” they ask. Aside from a few islands of automation – a siren on that erratic sump pump, a security system, and a few automated lights – things in my home are mostly un-automated. However, it won’t be long before these islands are bridged by a home network of LONMARK Certified devices. The Home and White Goods Task Group within LONMARK is about to embark on an ambitious effort to define functional profiles for a wide assortment of appliances and components within the home under the new leadership of Jim Hunter, of Nearmedia, Inc.

If rather than instilling fear, Messrs. Bradbury, Kubrick, and Orwell sparked excitement in your visions of automation, come join us in the online

newsgroups of the LONMARK Member Forum for making that excitement a reality.

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Integrator’s Perspective

Does the Ukraine Need System Integration?

The Ukraine is still a new country

You might be surprised by the fact that the Ukraine is Europe’s second largest country with twice the area of Germany and a population of 47 million (comparable to France, Italy or Spain). It is also the second largest country of the former USSR. But although it gained independence 15 years ago, it is still a relatively unknown country for most of the world.

Is there a market for LonWORKS solutions in the Ukraine?

After the disintegration of the Soviet Union and subsequent recession between 1991 and 1998, the real estate market has finally begun to develop.

Just like Russia – in particular Moscow – the building market in the Ukraine, particularly in Kiev, the capital of the Ukraine, is truly booming. Visit this beautiful country and you will definitely be impressed by the number of building cranes visible everywhere.

However, as we used to say, Kiev is not the whole of the Ukraine and is, as before, the most developed and developing city in the Ukraine. Although most investment is centered on Kiev, high return on investment is also achieved in other major Ukrainian cities such as Dnipropetrovsk, Kharkiv, Donetsk, Odesa and Lviv. This arti-

cle, however, will focus primarily on Kiev.

Even last year’s revolution did not noticeably influence real estate market prices. Many investors who wanted to enter the Ukrainian real estate market postponed their activities, preferring to wait for a better time to invest. Despite the turbulent political atmosphere, the legal climate was slightly improved and the level of corruption reduced. Now – one year after the revolution – investment in the real estate market has increased significantly.

At a time when commercial building markets in countries of Central Europe are in the saturation phase with accordingly low levels of profitability, the Ukrainian market now provides a quick return on investment for investors. Nowadays, profitability in all segments of commercial property in Kiev exceeds the level of London, Budapest, Warsaw and even Moscow. At the moment, investors in the retail property segment can expect to recoup their initial outlay within 3 to 5 years (rest of Europe 10 to 15 years), in office buildings in 5 to 8 years (rest of Europe 12 to 15 years), in the hotel industry in 7 to 12 years (rest of Europe 14 to 16 years), in warehouses in 8 to 15 years (rest of Europe 15 to 17 years). Of course the pay-back period for investment in real estate will expand, but it will take years and will not occur overnight!

Office buildings are the most attractive market

Although there are a number of attractive markets for using LONWORKS networks in the building industry, let’s take a look at the most advanced segment – the office building market.

The demand for office space in Kiev is still much higher than the available supply. Fifty to 100% of office space is already sold or leased at the construction stage. Ukrainian realtors have no problem finding clients for commercial property of any kind and quality. This imbalance will continue for at least the next three years.

The quality of most offices in Kiev is low. This situation will only change