

Honeywell User Conference

An

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It is seldom that I am able to attend a conference for purely hedonistic reasons – ie not have a presentation to prepare in advance, a session to chair, or an errant student to find... Yet, this year there was another exception to that rule – I was afforded the privilege of joining Honeywell Process Solutions for a trip to Seville, where the Honeywell User Conference was being convened.

Forums such as this are really about one thing – and that is to highlight the technological direction being taken by the host organisation. And they seldom disappoint.

There is another thing too – and that is to look as good as you can in front of your captive audience of clients. And they seldom disappoint!

The fact is I learned a lot, had the very real privilege of interacting with design engineers from Honeywell, and met and interacted with a variety of their clients from around the world. I will review each of these observations as we move through this article.

Background

This function is known as the Europe, Middle East and Africa (EMEA) Honeywell User Group (HUG) Conference. This was the 19th EMEA HUG, and the biggest EMEA event to date. HUG conferences have now been convened for 25 years. The conference drew almost 700 delegates making it by any standard a large conference. The North American event, obviously, is probably at least twice as big.

Companies like Honeywell convene such remarkable events to engender customer loyalty. A further consideration is that it seems that the age of the large Industrial Trade Show is over and there needs to be a replacement policy. A logical route is to have customers around and spend a week listening to them (and also to remind them of how wise was their original choice of control system vendor).

The week was a week of intensive exposure of the Honeywell product... but it is quite apparent that there was a genuine (word chosen carefully) emphasis on user feedback too. To this extent no holds are barred. Indeed, there are some moments when one wonders how much of what is said should, actually, be made available outside of the conference – so honest is the feedback and so genuine the engagement of the participants.

Achieving these levels of openness, and with the press present,

is to be commended. As any engineer will tell you, it is only from such feedback that progress is made at all. So this is exceptional. It also shows a lowering of the arrogance that one often associates with very successful multinational organisations. It is about the voice of the customer back to Honeywell. This aspect was to me, the most valuable, as there is opportunity for real learning.

Adapting to change

The theme for this year's conference was 'adapting to change' – which I found to be a somewhat worrying theme on first sight. I mean, who's adapting, and why? What became clear during the week's proceedings was that the customer base is, frankly, a conservative one. We are talking about evolution, not revolution; we are talking about the massive aversion of that customer base risk - and we have an organisation that views itself as innovative and 'cutting edge' attempting to draw its customer base along - as we move rapidly along with the next technology wave.

A major emphasis was placed on the fact that this company claims to be in it for the long haul. In other words, they make it clear that they will support systems for their lifetime. This is born out by the fact that there are customers that still have in place DCS systems installed in the 1970s. The emphasis is on lifecycle management – assisting customers in upgrading, deciding when and how to, and the best path to follow. Much was made of the fact that these systems can be upgraded in phases, and that they are engineered in such a way that they will still work – better, not worse.

An emphasis was placed on how seldom there are new control platform releases – this seeming to be around every 15 to 20 years. A new platform has recently been released – this being the Experion R300 – an open platform, and considered to be one of the most innovative. Yet the market is still largely into the process industry – a conservative industry at best, and for good reason. This implies that the emphasis is not on revolution, but rather on evolution. To my mind, sound engineering.

Technologies – developments and concerns

Technically the conference covered too much to mention in any meaningful way, so I have chosen to limit my comments to items that

opportunity for real learning

caught my attention. For example, there is no doubt that there is a move from proprietary to open systems. Open system in the context of process control, generally implies using Microsoft products and open communications standards as opposed to purpose-designed process control systems. A slightly different view to the office or classic IT environment.

But this has some implications – many of which are well-known and understood in the office environment. For instance, an area of concern was the assertion that there are power system control platforms in Europe that are being purposefully penetrated and assessed by highly proficient hackers operating from elsewhere in the world. The consequences of this, of course, are deeply concerning to say the least. It also brings to mind the very different views on network, information, or generically cyber security that exists within IT and control environments. For instance, the IT approach has traditionally been to establish a single firewall, effectively surrounding the system to be protected, and effectively keep the bad stuff out. The consequences and inconveniences of sudden massive interventions are, of course, limited in many IT situations where the health of the ozone layer (for example) is not actually at stake. In addition, the IT emphasis has been on securing data. Should an attack happen the general approach is to isolate or even turn off a section of the network. And that's just tough.

This cannot be the approach in a control environment. Here the emphasis is not simply on data security – although that is of course important. The issue is to remember that a control system is about safety of people and plant, so the engineering effort required to deal with the challenge is different. In addition, the solution adopted by Honeywell is one of concentric layers – much the same as a logical approach to EMI – the assumption must be that there can be a source of ingress within the plant – and not just from the management level.

In addition, Honeywell pointed out that it now has over 30 million wireless sensors installed, and they have 400 engineers dedicated to working on wireless systems. In particular, they are tackling the thorny issue of how best to ensure reliable and secure control over wireless (not simply data logging and so on).

There can be no doubt that Honeywell sees wireless as the way of the future – without a doubt. It is also true that they see open sys-

tems as key. As noted above, security – engineered security – is key. Significantly, they do not view wireless as introducing any additional security risks. They make the point that while cable-based data links were developed with security as very much an afterthought, the whole ethos of wireless links has been one based on radio engineering principles which have traditionally had at their core the matter of security. Let's see.

Concluding comments

I have no doubt that Honeywell is truly interested in listening to their customers. I also have no doubt that they act upon what they hear. It is also quite apparent that they try extremely hard to really involve local people in their local branches. To this end, I note with interest that they have appointed an Angolan to head up their new Angolan office.

Outside of the Honeywell presentations, Walt Boyes, editor in chief of Control Magazine, noted the very concerning situation regarding the death of skills in process, control and automation engineering. He bemoaned the fact the fewer and fewer youngsters were considering engineering as careers, and that Indian and Chinese engineers who had come across to Europe and the USA to find a better life are, in fact, returning to their home countries in droves. This is because, for engineers, they have now reached lifestyle parity with the West. Interesting stuff. And more challenges ahead for countries like South Africa that may, in fact, consider importing engineers from those nations.

I found being there a privilege and I benefited. My sincerest thanks to Honeywell South Africa for affording me the opportunity.