

Harry Sim, Honeywell Process Solutions:

Knowledge Is The Challenge



According to **Harry Sim**, technology issues such as which instrument to buy, which fieldbus to select, these are important but ultimately smaller questions in a much bigger puzzle: how to give people the right knowledge at the right time to make the right decisions. He reveals more to **Bob Gill**.

Harry Sim is Vice President, Marketing & Business Development, Honeywell Process Solutions, a leading player in the process automation sector. Flying in from Phoenix, he was in Beijing and Singapore recently to launch the latest version, R300, of the company's flagship Experion Process Knowledge System (PKS), a single system for process, business and asset management.

As Mr Sim explained at the Singapore press conference, Experion PKS R300 has number of key enhancements: a new vertical design that drastically reduces footprint; a control system firewall for cyber security; and automation of complex procedures, through the embedding of best work practices, to improve operator efficiency.

Q: How is Honeywell Process Solutions positioned within the overall Honeywell organisation?

A: We are part of the Honeywell Automation and Control Solutions division of Honeywell International, the US\$26 billion dollar company headquartered in New Jersey. Automation and Controls is itself an US\$8 billion dollar business, and Process Solutions is US\$1.8 billion out of that, employing 8,000 people in 90 countries.

Our corporate HQ is in Phoenix, Arizona, which is where I am based. Shanghai is the overall Asia Pacific HQ, with Singapore being the HQ for Southeast Asia. Manufacturing and R&D facilities are located worldwide.

Q: And the scope of your responsibilities?

A: Essentially, I am in charge for worldwide marketing for Honeywell Process Solutions, and all the different flavours

of marketing take place within my group, which consists of around 150 people.

There is product marketing – planning the technology roadmap and deciding which product lines to invest in; solutions marketing – piecing all the products together to create overall solutions for vertical industries; strategic marketing – determining which vertical industries we should be serving and whether we need to buy other companies ie: mergers & acquisitions activities; and the typical marketing communications activities – promotions, advertising, brochures, etc.

Q: Earlier in your career you were involved in the Space Shuttle missions?

A: Yes, that's right. Growing up in Hong Kong, it was a childhood dream to be part of the space programme. At NASA, where I spent five years before joining Honeywell, I was involved in building the payload, bringing it to launch, and then managing the flight and its return from mission control – which, I guess, must be the ultimate control room!

Q: The state of the process automation market in Asia – any countries that stand out?

A: Well, obviously, you cannot ignore China; it dwarfs every other country in the region in terms of new investment being put in to build up the infrastructure – power stations, chemical plants, etc. Although the size of its process automation market is one-third of China's, India is seeing a similar boom in investment and growing as fast, if not faster, than China.

While India and China are the two engines of new growth, Japan is a very big market with a large installed base, although pretty mature and not changing rapidly. In Southeast Asia – especially Singapore (Jurong Island), Malaysia, Indonesia – we are involved in a lot of offshore facilities, helping them to upgrade systems, and this region is still very significant for us and definitely not a laggard in growth.

Q: So how does Honeywell Process Solutions differentiate itself in the marketplace?

A: Where other process automation companies are focused around instruments with the people nowhere in sight, we are focused around people. What that means is that we use our technology to deliver knowledge to help people make actionable decisions better and faster from the flood of data that's all around.

The challenge in our industry is not technology, let's face it, all the stuff works pretty well – ours, Emerson's, Yokogawa's, whoever's. Instead, the challenge is knowledge, and I am not sure everybody realises this. Good people are not being replaced, companies are having to do more with less, so you need a way of capturing knowledge and domain expertise (in our seven selected verticals) into software and tightly integrating that into the control system – and that's what we do with Experion PKS.

Q: Presumably you need to spend quite a bit of time articulating this message to customers?

A: People in the industry do still love this 'widget' stuff, but it's not a widget world any more! For customers who used to buy boxes and just compare one box to another and which is cheapest, their bosses are now saying, "I don't care which box you buy, just tell me how much money I'll save over the lifecycle."

So now, more customers are now thinking about the outcome, the end result, not the box, and we tell them that if they want that outcome, we can deliver the technology wrapped with the necessary services and the knowledge.

Q: Cyber security is one of the 'hot topics' in automation this year. Are customers becoming more aware of the risks to process plants?

A: Everyone is certainly concerned about both cyber and physical security. But one problem is that there are, as yet, no guidelines or standards in place. Now that we're opening up what were previously closed, proprietary systems to the outside world, you cannot get the benefits of doing so without thinking hard about cyber security.

For Honeywell, we're addressing the issue in the new Experion R300, which is designed to be inherently more secure at the core, having a dedicated firewall for the control system which ensures that only messages dedicated to control are passed down to the controller.

Q: The company has won a number of awards for its wireless transmitter technology. How do you see the market trend and customer acceptance of wireless technology in the process sector?

A: Yes, we are the first major automation provider to have a wireless product, and there has been phenomenal interest in the XYR 5000 wireless transmitter since it was released last year.

There are a lot of things that plant managers would like to sense but cannot because it's too expensive or awkward to do with cabling. So the wireless technology is targeted at this 'additional sensing' category, ie: which is not mission critical and where it's ok if you miss a couple of data points or they come in as second or two late. With wireless, you can justify sensing secondary process data such as equipment health.

Going forward, Honeywell has won a contract with the US Dept of Energy to look at wireless sensing using mesh networks, which enable systems that are redundant and robust, with lower energy use and long battery life.



Harry Sim explaining the business drivers for a process knowledge system.

Q: Some of the challenges of managing a critical function in a high technology environment?

A: We have to be a marketing-driven company, listening to the customer. And that's a big deal given that, too often, companies in the technology business build wonderful widgets and assume that the people will come.

Internally, marketing is a change agent within the company. We have a lot of people with a lot of domain knowledge and we need to train the marketing aspect into them. And it's a global business – all these 150 people around the world, how to make sure they understand all the different needs around the world so that we can develop a technology roadmap and our investment priorities?

But I love it. I was in China yesterday, four days before that in Latin America, and now today in Singapore. Meeting different people, seeing different cultures, determining different customer needs; it's all very exciting! 🎯