A non-profit body has provided stewardship for the regions electronics industry for almost half a century. SEMI Southeast Asia president Ng Kai Fai discusses the industry outlook with MALAYSIA SME®
SEMI Southeast Asia president Ng Kai Fai speaks to us about the outlook of the E&E industry in Malaysia, Industrie 4.0 creating a greater demand for talent, and SEMICON 2018

MALAYSIA SME®: Tell us about SEMI Southeast Asia and the role it plays in the semiconductor industry.
Ng: SEMI Southeast Asia, a non-profit association, has been around for more than 47 years now. What we do is foster and facilitate the development of the electronics and manufacturing supply chain globally. We do this through many different areas, including advocacy.

SEMI provides industry stewardship and engages our members to advance the interests of the global electronics supply chain. We set standards in the semiconductor manufacturing environment which many companies in the semiconductor industry adhere to. In fact, any electronics manufacturing supply chain that manufactures semiconductors uses SEMI standards.

Because of our not-for-profit nature, we are also governed by our members. We now have around 2500 members. We also help our members in the region to internationalise their businesses.

MSME: Who is eligible to be a member of SEMI?
Ng: Anyone in the semiconductor industry is eligible to be a member. Any company in the manufacturing supply chain would qualify but there are certain criteria which we screen through. Any of these players who would like to take a role in developing the industry are welcome to join SEMI.

MSME: How can SMEs benefit when they become members of SEMI?
Ng: When we talk about supply chains, the manufacturing environment is pretty diverse. One supply chain could be an OEM for instance who has to build equipment that complies with SEMI standards which the industry adheres to when manufacturing equipment. Being a member would give the individual company access to these standards. Much more than that, they would have an influence on what kind of new standards need to be created. So in some sense, I think being a SEMI member as an SME allows them to participate and build certain criteria to their competitive advantage. They basically influence and are part of a community which build standards which improve productivity of the industry.

MSME: What are the main challenges currently in the E&E sector?
Ng: Talent is a big issue right now. One thing really important in the scope of SEMI right now is that we continuously develop talent, especially (Science, Technology, Engineering and Mathematics) STEM talents. We’re giving that an even more significant push right now given the fact that STEM enrolment in schools and universities are dropping worldwide.

In fact, we just had an article by our CEO saying that there are more than 10,000 jobs in Silicon Valley that are vacant due to a lack of the right talent. It’s a global problem.

So right now, we’re doing our part and working with the Ministry of Education to put together some programmes that can excite secondary school students about Science, Technology and Maths.

But in terms of talent for SMEs, one of the big things is that SMEs need to look into more adoption of Industrie 4.0 rather than just counting on manpower to do the things the way we used to. And this adoption of smart manufacturing is more than just for SMEs, but also for big companies. But the trouble is with the difference in adoption levels. Even in Singapore, SMEs are slow in the adoption of Industrie 4.0, because it’s so diverse – what exactly does Industrie 4.0 mean? Most SMEs don’t know.
MSME: What are the main barriers SMEs face when implementing Industrie 4.0?

Ng: Given the fact that SMEs are always sensitive about cash investment, I don’t want to understate that cost is a big problem. But Industrie 4.0 adoption has many levels. The adoption of automatic systems to generate your customer databases, for instance. A small adoption like that doesn’t cost a lot of money but it saves a lot of manpower. We exchange name cards so frequently, but for someone to key all that data in is cumbersome. For someone to track customers’ purchases over time is also very tedious. So automation could help in these aspects.

These kinds of changes aren’t too costly. Right now, SMEs are most of the time still dependant on hard talent, but the adoption of robotics would save them in the long run. The question for the SME is not about investment right now; it’s about what the payback period is. They would soon realise that the payback period is significantly shorter because robots can work 24/7, unlike human beings. So those are the areas where SMEs really need to consider moving in tandem with what the world is moving towards.

The second thing SMEs lack is an understanding of market momentum in the industry. It seems to me that most of the time SMEs aren’t very sure about trends and aren’t exposed enough to them. In the electronics industry where things are moving so fast, if they are unsure about the trends and the market, they might not capture these trends or market demands in their own business.

While the government grants are a good start, there needs to be a greater awareness of these programmes that help them, and most times they aren’t. Maybe it’s down to both sides - the government isn’t promoting and dispensing the information through the right channels and also maybe the SMEs aren’t keeping abreast of what the government is doing.

MSME: How can SMEs in the E&E industry go global with their business?

Ng: Most SMEs find it difficult to internationalise because they don’t know which the best channels are to reach out to and the collaborative partners to connect with. This is where SEMICON can help (an annual exhibition SEMI organises). It’s a platform that exposes SMEs to other SMEs and to even bigger companies to seek an understanding of whether there is any partnership to be made. We have more than 250 companies there, and we expect more than 8500 people there, all in the same electronics, manufacturing trade. Conversations will be made.

Rather than just being an exhibition, SEMICON is an enabler for SMEs to internationalise their business through networking, exploring collaborative opportunities amongst the 8500 people in attendance and expanding their network within their peers. It’s a global event with international delegates coming in from around the world and is an opportunity not to be missed for SMEs.

SEMICON 2018 is set to happen on May 8th this year at MITEC, with a sterling list of speakers lined up to speak about the electronics market sector.
Getting to know SEMI

By Susanna Lim

About SEMI
SEMI is the global industry association serving the manufacturing supply chain for the micro- and nano-electronics industries, including:
- Semiconductors
- Photovoltaics (PV)
- High-Brightness LED
- Flat Panel Display (FPD)
- Micro-electromechanical systems (MEMS)
- Printed and flexible electronics

Mission
SEMI provides industry stewardship and engages our members to advance the interests of the global electronics supply chain.

Vision
SEMI promotes the development of the global electronics supply chain and positively influences the growth and prosperity of its members. SEMI advances the mutual business interests of its membership and promotes a free and open global marketplace.

Benefits
SEMI expositions, including SEMICON®, are recognized around the world as the premier forums for showcasing new products and technologies.
SEMI is driven to serve member needs by an international Board of Directors, regional advisory boards, numerous advisory committees and more.
The SEMI Industry Research and Statistics program collects and reports critical data on the global microelectronics industry.

With other organizations and coalitions, SEMI promotes.

Membership
As a SEMI member, you, your company, and your employees have access to a world of opportunities that connect you to new markets, new customers, and new business. Learn how SEMI membership connects you to:
- Global markets and business opportunities
- Communities and Special Interest Groups
- Information and market research
- Advocacy and action
- Exclusive member benefits

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Exclusive member benefits
- Development of new processes, tools, materials, and manufacturing standards
- Advocacy and action on policies and regulations that encourage business growth
- Investment in organizational and financial resources
- Integration across all segments of the industry around the world
- Addressing these needs and challenges requires organized and collective action on a global scale.

SEMI facilitates the development and growth of our industries and manufacturing regions by organizing regional trade events (expositions), trade missions, and conferences; by engaging local and national governments and policy makers; through fostering collaboration; by conducting industry research and reporting market data; and by supporting other initiatives that encourage investment, trade, and technology innovation.

In addition to supporting access to regional markets, SEMI helps its members explore diversified business opportunities and contributes to the growth and advance of emerging and adjacent technology markets.

Committees
Executive Committees (Board of Directors, Regional Advisory Boards)
Executive Committees consists of executive leaders from SEMI Member companies, the SEMI Board of Directors provide guidance to SEMI Leadership. SEMI Regional Advisory Boards help guide SEMI services and programs in all major manufacturing regions of the world.

Standards Technical Committees
SEMI brings together industry experts through a number of committees to develop globally accepted technical standards. These Standards Technical Committees provide the forum for the essential collaborations that must be achieved to move new and existing markets forward efficiently and profitably. What to know more? Click here for the benefit of participating SEMI Standards Program.

Groups are structured according to their individual charter and bylaws.

Special interest groups
SEMI Special Interest Groups (SIGs) connect SEMI members to discuss and advance specific issues - mostly technical issues - that are important to SEMI Member’s business development interests. These SEMI communities provide members a collaborative platform and a collective voice within the electronic industry globally, allowing SEMI members access to information on parts of the extended electronic supply chain; and, the SEMI standards and requirements platform to develop the community’s worldwide capability. Special Interest

Malaysia SME™’s Engage is a monthly pull-out aimed at giving business councils, chambers of commerce and trade associations a platform to Engage with SMEs.

If your association wishes to be featured, please contact the Editor Rupinder Singh at: rupinder@malaysiasme.com.my