

Making recession work for you

Indian Semiconductor Industry Is Looking At Ways To Tide Over The Slowdown And Chart Out Ways To Become A Global Leader

Times are challenging and tough with the severe global economic recession. But this is also the best period to think, introspect and act differently to latch onto opportunities. The global semiconductor industry is facing one of its most severe downturns and the scene in India is no different. However, it is also a golden opportunity for the country to reap the dividends of this technology and emerge as a major global hub for the industry.

The India Semiconductor Association (ISA) at its two day vision summit held in Bangalore on February 16 and 17 had aptly called it, "India: Gateway to Future Markets — Unleashing Opportunities". People from far and wide gathered at the summit, which acted as a melting pot of ideas, discussions and potential business opportunities.

Silicon Technologies co-chairman Nandan Nilekani set the tone for the summit positively by emphasising that "future looks great". He felt that the semiconductor industry will find their place in the areas of computers, mobile phones, communication equipment and consumer electronics. However, all this going to change as there are hitherto untagged segments like healthcare, energy, connectivity. These sectors will throw a multitude of opportunities for the Indian semiconductor industry.

uniquely positioned take the lead for the wave of the future and we need to create that in our minds."

According to a recent report by ISA, the total revenues of the Indian semiconductor market is poised to grow from \$5.9 billion in 2008 to \$7.59 billion in 2010 at a compound annual growth rate (CAGR) of 13.4%. The total available market (TAM) revenues are anticipated to climb from \$3.7 billion in 2008 to \$3.24 billion in 2010 with a CAGR of 13.1%.

ISA president Poojamma Shetty said, "This is a tough year for global economy, if the semiconductor industry needs to grow then we need to look at the domestic market."

Dr VS Arunachalam, chairman and founder, Centre for Study of Science, Technology and Policy (CSTEP), Bangalore said that the problem of power is more acute than that of terrorism. He said that a revolution the

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area of energy generation and consumption was impending and felt that solar energy is going to be major player.

This could also be the best time for the Indian semiconductor industry to harness the most important resource — people. West Bengal IT minister, Dr Debesh Das said, "Every negative thing has also positive things, once this recession is over people will not find proper talent." He also said that our main resource is talent pool and we will have to keep this ready especially in grooming the best talent from colleges.

Local products, emerging opportunities

India's over 250 million young consumer market is growing rapidly is propelled by a young, dynamic and lifestyle-savvy consumer base. This also provides the platform to grow locally-developed technologies which are attuned to the Indian market.

Prof Rajeev Gowda, Indian Institute of Management Bangalore, professor, economics & social sciences, said:

"It is reasonable to believe that the country will have ubiquitous connectivity to a kind of grid where every citizen will get some kind of electronic device," Mr Nilekani said. "The transformation of India's development will be through technology."

He predicted that the semiconductor industry in India will be going to address some of the fundamental challenges facing humankind like energy, healthcare, environmental services, which will require hardware, software and components.

Following Mr Nilekani's sentiments, ISA chairman and Conference Design Systems India MD Jawahar Ahuja said, "The challenge for us is to see how long the downturn is going to last and when in the recovery, we need to expand our horizons in the true spirit and look beyond the next few years and the picture is very promising. We have access to that market and we



From L-R: Poojamma Shetty, President ISA, Jawahar Ahuja, chairman ISA, Dr Debesh Das, minister in-charge IT department, government of West Bengal, Dr VS Arunachalam, chairman and founder, CSTEP

"There are tremendous opportunities in harnessing technology for rural markets and creating an environment where innovators can flourish." He also urged the industry bodies to work closely with the academic bodies for a better cross-pollination of ideas.

Dr Arvind S Bharatwaj, CEO, Automotive Informatics, said there is a huge growth in the automotive segments and the present situation is temporary. India is already contributing by providing very complex software for global marquee automobile brands and the challenge is how to leverage that for the Indian market.

He felt that Indian vehicles today carry a lot more automotive electronics than in the past and it is only a matter of time before some breakthrough is made, which can also be used for developed markets.

Healthcare is another segment which has evinced strong interest among semiconductor companies looking at low-cost, high-technology solutions. Ashish Shah, general manager, GE Healthcare Global Technology Organisation India, said that they have come out with several models which are very innovative and applicable to emerging markets like India. Though he cautioned that all these solutions need to be scalable.

Nokia India CEO head Ajay Vasudeva said there is a lot of help semiconductor industry can provide in the making mobile devices powerful multimedia computers as research is being undertaken to make this instruments applicable in areas of mobile banking and near-field communications.

Embedded Software: its growing influence on the hardware world

Semiconductor is a technology which is not quite seen but is very visible in terms of the applications and the most of the products are embedded. Anil Gupta, MD, ARM Embedded Technologies, said that there is high demand for features but the prices are remaining the same. He felt that consumers are demanding more and

is the challenge for the players to look at driving innovation through the optimum use of software, chip and hardware design.

Wipro Technologies product engineering services senior vice president VS Venkatesh said, "People would like to see multiple things in a single screen and this requires huge amount of computing memory." Though, he felt that the final decision on such products will be a trade off between cost and functionality.

The growing use of embedded software will also see the creation of certain standards. Kabir Felli, MD, KPIT Cummins Infosystems, said a platform-based approach could solve many of the issues which are seeing convergence of hardware and software.

Managing in challenging times: strategies for the Indian knowledge sector

The technology sector is knowledge-based. The industry has to routinely deliver higher level of integration in ever-shrinking product cycles. Through decades of constant improvement, the industry has learnt to survive and even thrive in the harshest conditions.

Dr Vivek Mohandas, senior vice-president, strategy & business transformation, Freescale Semiconductor, said that the rules of the game have changed and it is all about survival. Those with cash will be able to survive and it is also the best time for companies to look at selective acquisitions as good companies are available at comparatively cheaper valuation.

Dr G Venkatesh, chief technology and strategy officer, Indian Communication Technologies, felt that half of the growth for the industry would be coming from countries like India, China and it also throws up enough opportunities for the future.

VC Panel: Pains and gains of getting funded in tough times

In today's uncertain and new company, there is always the question of money. And now money is certainly hard to come. Venture capitalists are certainly looking at deploying their capital in the right companies and are being choosy but entrepreneurs are cash strapped and need money to expand.

Dr Kumar Shatalagi, MD, NEA-InfoGIS Ventures, said that there would be two kinds of semiconductor companies — one focused on IP creation and other on services — with each having its own set of challenges. "If there is a need for too much capital, investment, some required to invest will also be longer."

He, however, cautioned the entrepreneurs, "Never raise money unless you need it." Sandeep Singhal, co-

founder, Nexco India Capital, said that the biggest challenge is managing growth versus risk.

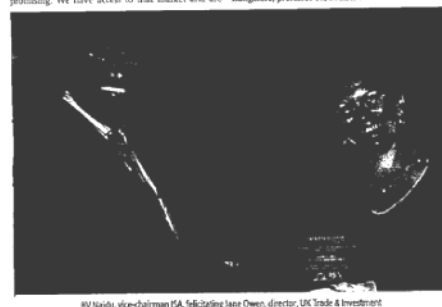
He felt in times like these, it is better for the entrepreneur to be truthful with their customers, monitor the cash flow situation very carefully and keep a close tab on the costs.

"Taking a more contrarian line, Dr Harish Hande, MD, SILCO-India, avowed that entrepreneurs need not take the money from VCs, if the investor community does not understand the business. "If you have the confidence you will survive, don't take more money than you need and if you have good process, money will automatically follow," he remarked.

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Summing up the event, the past chairman of ISA and Managing President and CEO, BSOI Services, S Jaisankaran said that recession should be allowed to go to waste and even as the industry is servicing the international markets it is also the time for them to look very closely at domestic market also.



Dr Nandan Nilekani, co-chairman ISA, Richard Jay Owen, director, UK Trade & Investment