The cyclic nature of Semiconductor business is nothing new; we have been experiencing them since the advent of semiconductors. We have to admit that the recent downturn has been one of the worst, and mostly driven by financial crisis. Normal Semiconductor cycles are mostly driven by i) capacity build up, ii) node transitions and iii) wafer size transitions. In recent years, we have seen the trend towards fabless companies, which is driven by high cost of Research & Development and high cost of establishing fabrication facilities. With the demise of IDM (Internal Device Manufacturers) and increased dependence on foundries, equipment suppliers are left with few highly demanding customers. Since, we at HORIBA are suppliers to the Equipment Industry; this change has significant impact on us.

Moore’s Law is alive and well. We are also experiencing more and more functionality at lower price points, while products are being introduced at very fast pace. Since we are part of the supply chain, we have to adapt to meet these challenges. At the same time, we have to realize that unit volumes have significantly increased over the past decade, while the Semiconductor average annual growth rate ($) has fallen to 6% (1994-2009) from over 11% (1984-1994). The growth rate of Semiconductor Capital spending has slowed down considerably to plus or minus 5% since 2003 from about 15-20% in the 90’s.

Hence, it is clear that business conditions have changed dramatically around us; however, some companies behave and operate as if nothing has changed. Reality is that we must face
this strategic shift head on. This is a question of survival and HORIBARIANs have shown over the past 50 years that they can adapt to changes. This is consistent with messages from President Horiba and the article by Dr. Horiba in Nikkei Business on September 7, 2009. The message is very clear: if we do not change and adopt this strategic shift, somebody else will. At the same time, we have to be vigilant against pirates; yes, cheap imitators. Because of the cost pressures, some end-users might be willing to take risks and give these pirates a chance to improve their reliability. Therefore, we must provide cost effective, reliable solutions to our customers with the shortest product introduction cycle time. We need to be Agile.

In the coming decade we will have another strategic shift (e.g., wafer size transition to 450 mm). Research & Development costs are going to skyrocket and as a result, I see consolidation in Semiconductor Equipment Market. We need to prepare ourselves for this change while we are preparing for mid and long range planning. We at HORIBA have a distinct advantage by collaborating with various Segments. We can face this challenge and address the adjacent markets.