The world is quickly and constantly transforming as new technologies continue to enter the market. This rapid pace of change is perhaps felt most heavily in the electronics industry which brings in the biggest and newest innovations every year. Look back just a decade and you’ll see how the industry has shifted, with completely new heavyweights leading the field. The evidence is clear that a company must consistently evolve with the times to remain an industry leader in electronics. Following, we’ll look at the five foremost challenges said company must look forward to.
1. **Brief Product Life Cycles**

Technology isn’t evolving for its own sake. It’s responding to the wants and needs of consumers hungry for products that perfectly suit their day to day lives. Thus, companies in Electronics Manufacturing Services and contract manufacturers are required to have quality processes in place for new product introduction. To make sure product launches hit set goals on quality, volume and release, it’s important to use closed-loop communication concepts between engineering, sales and manufacturing.

2. **Intricate International Supply-Chain**

It is obvious now that we live in a global economy. Those who are positioned best to deal with the complexities of international sales are those best positioned to succeed in the long run. Now, it is common for components to skate across multiple continents—sometimes more than three—before arriving at their end point. Companies must be prepared to deal with varying international standards along with the twin issues of compliance and traceability that are prone to raise operational problems.
3. Demand

The worst of the global economic crisis is fortunately in the rear view mirror, so it is expected that the demand for electronics should continue to rise. While cyclical fluctuations and economic dips are responsible for large shifts in demand, on a smaller level technology is highly susceptible to changing local conditions because tech is now so heavily tied to consumer demand. Consumer demand is an uncertain thing, determined by the vagueness of perceived value and swiftly fleeting tastes. For that reason, production capabilities must remain lean and able to shift quickly with uncertain demand.

4. Environmental Issues

This is no longer a world where companies’ margins are freely raised above the concerns of the environment. New standards and regulations are pushing electronic manufacturers to consider their ‘social responsibility’ when making decisions both small and large. A manufacturing consultant says some Electrical Engineering Master’s programs are now including sustainable engineering strategies in their curriculum to accommodate the growing trend of environmental awareness. The entire life cycle of a product must be considered; from manufacturing, with the use of harmful chemicals and human exposure; to consumer use, with the consumption of energy; to the end of its life, with waste disposal and complex disassembly.
5. Tighter Margins

Consumers have benefited from a global marketplace that has emphasized competition to bring in the latest and greatest innovations and lower prices. On the supply side, however, this has to lead to shrinking margins. Gains in efficiency and organization have slowed and there is not enough differentiation between products to stave off this growing trend of commoditization. Electronic manufacturers must deal with this downward pressure on operating margins as lights continue to turn on across the world.

Of course, those that are part of electronics manufacturing already know how competitive their industry is. Just look at what evolution has occurred within semiconductor manufacturing to see how challenging it can be dealing with steadily shrinking margins and higher product performance and quality expectations. Yet, industry leaders find a way to make it all work and come together consistently over an extended period of time. They have unlocked the winning combination, which perhaps is based on continuous process improvement and significant investment in the systems and processes of how business gets done.