"Achieving Breakthrough Is Through Ensuring Reliability In The Verticals We Play"

There is a shift in revenue generation that is more promising towards the service side than the product side, and the Internet of Things (IoT) would be the driver of this natural extension.

T.C. Ramesh, Head- Technology, Quest Global speaks to Shanosh Kumar from EFY. Quest is involved in converting dumb devices to smart devices by connecting devices to cloud and processing the collected data to create meaningful insights.

Q. What according to you is the tipping point that led to IoT being so popular?

A. We are in the engineering space and have developed highly engineered devices for many applications. IoT had been there in different forms from quite some time. Now with all the technology that has come in, it is becoming easier for us to optimise with the Internet.

Q. We have heard of engineering analytics being so important to IoT. Could you share your views?

A. Industrial IoT is a smaller segment of IoT where we talk only about machines. Analytics is an integral part of IoT. It cannot be seen in isolation. In engineering analytics, the data generated by devices is fed into a swarm of servers (also called the cloud) and mathematical models are developed using this data to help take proactive decisions.

Q. But analytics has always existed. How has it changed with IoT?

A. What is fundamentally changing with respect to IoT is that the product will have different dimensions. First, is that it is no longer standalone; second, it is getting connected with the ecosystem. Though the product life cycle remains the same, what goes into it has changed. It is always better to maintain than repair and possibly this is the benefit we bring into the verticals we handle using analytics. Here we start feeding data back into machines for improvements. This is where we will be playing a big role around the aura of analytics. We are training our people in understanding data, using newer tools such as 'R' that are applicable to this business.

Q. Could you share a simplified example of how engineers come up on proactive interventions?

A. While measuring the engineering data such as noise, vibration, temperature spin and rotation is when trends emerge. When something starts showing a trend you are able to relate is back to what might happen. Now when we analyse the trend we can take interventions to the most possible extent and correct the actions if required. We combine the knowledge of the product (gained by our years of experience in product

development) with the physics that defines their behaviours and use our experts to analyse trends and suggest remedial measures to our customers.

Q. What's the challenge with building Industrial IoT products as opposed to consumer IoT?
A. Consumer electronics can be made intelligent quite effortlessly but when it comes to industrial products from decades ago that were designed for a specific use case, we need to evaluate the return on investment before enabling them on IoT. Assuming that the use case can see phenomenal improvements, we can enable and convert them into intelligent machines. Platforms like ours focuses on data and try to create meaningful insight out of it in order to deliver value in the integral product development segment.

Q. What is important to achieve a breakthrough in the Internet of Things zone?
A. The questions are about the timing. Interestingly, it is about justifying the return on investments, the disruptions that come across and more critically, the security of data according to Quest. Machines used in verticals like Power, Healthcare, Automotive, Aeroengines send out safety critical data and hence data security is a key driver. Once these major concerns are addressed, we will not have a tendency to broad base Industrial IoT with commercial devices. Achieving breakthrough is through ensuring reliability in the verticals we play.