As you walk through the KPIT corridors, you realize that it is buzzing alive with actions and discussions about driving and co-creating innovative possibilities. The labs, paperwork pile-ons, rough drawings, animated debates are all testimony to it. This spirit of innovation and commitment to leadership has been the cornerstone in KPIT’s journey from being a $50MN company in 2006 to being a $400MN in 2013 and sprinting towards the $1BN mark.

To sustain this innovative spirit, KPIT has set up the CREST (Center for Research on Engineering, Sciences and Technology). The conversation with Dr. Vinay Vaidya, CTO & Head of CREST, KPIT and Mr Krishnan Kutty, Associate Technical Fellow, KPIT, sheds light on Innovation being the DNA at KPIT, our intuitive functionalities and driving customer satisfaction. Excerpts from the conversation.
Dr. Vaidya and Krishnan – Appreciate you joining us today.

**Edit Team:** KPIT has always focused on product innovation and has motivated generation of innovative ideas across the organization. Please elaborate on how CREST was established?

**Dr Vinay Vaidya:** Since 2006, KPIT has put focused efforts on achieving non-linear growth through innovation & hence an R&D centre at KPIT was established. 1st thing that we wanted to do was to name this R&D centre & we named it CREST - Centre for Research & Engineering Sciences Technology. It has been a really exciting journey for CREST.

They have now adopted our proprietary tool & are reaping cost benefits out of it. One of our clients, a leading Japanese Tier 1 company appreciated us by mentioning they have been hugely benefited by the Automating V&V tool developed by KPIT.

**Edit Team:** How are our customers benefitting from KPIT’s CREST? Would you like to quote a couple of examples wherein our customers appreciated us for our spirit of innovation?

**Dr Vinay Vaidya:** There are several areas where our customers have been benefitted. While working on Sensors, for a particular design, we were able to reduce its count in vehicles. This helped the customer to reduce costs in the production cycle. Another example is when we were able to save our client’s costs by automating V&V testing.

Initially, Night Vision was the area of research for us & the scope of work in that segment has expanded exponentially. We are also witnessing a lot of traction in advanced driver assistance systems (ADAS). Since then, we have been working in various domains including multicore technology, Sensors, Verification & Validation (V&V) etc. In order to provide maximum benefits to our customers, we have continued to work on newer fronts and technologies. I believe CREST will play an integral role in KPIT’s vision of reaching $1B mark.

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“**The main reason for our success is due to the ability of our team to come up with different & great ideas independently**”

“The ability of our team to think out-of-the-box & the spirit of our leaders to develop innovative products for future is something that makes KPIT unique & stand apart in the league”

**Edit Team:** How are innovation at KPIT different than that at other companies?

**Dr Vinay Vaidya:** It is the constant endeavor of our team to engage and involve themselves towards frugal engineering & develop cost-effective solutions. One of our engineers came up with an idea of developing a shock absorber, based on a new technology that had a great impact on the ride quality. Now, the cost differential of this new shock absorber is minimal.

KPIT each time raises the ‘innovation’ bar higher and it is a challenge to reach that level. Even during the global recessionary time, KPIT envisioned to be a technology focused company & increased the emphasis on R&D and development to create innovative products for future. This is a remarkable fact about KPIT. The leaders have always favoured promotion of good ideas & they strived to implement them.

**Edit Team:** Please explain about co-innovation at KPIT

**Dr Vinay Vaidya:** We are proactively working on projects based on the co-innovation concept. Considering the speed at which technology is shifting gears, it is difficult for a single individual to grasp it all. Hence a team of multiple individuals from same organization is formed. However, this again is not sufficient & needs an external ecosystem as well. To enable this, we are working with different research institutes globally & have tie-ups with different colleges for promoting joint R&D. Despite this, there is a need to understand the exact problem faced by customers, considering their niche expertise. Knowing the exact customer pain-points can help us develop targeted solutions. Therefore, we have been doing many projects based on co-innovation with customers & partners. The intention is to build and take ahead the fact that KPIT is a one stop solution to all their challenges.
**Edit Team:** KPIT has filed 51 patents till date. Would you like to elaborate on your vision plans for CREST?

**Dr Vinay Vaidya:** Our future plans include several different aspects such as:

- Increasing employee involvement that will lead to major breakthroughs. We plan to include more & more KPITes from diverse backgrounds in this exciting process of Innovation. We will enable this by creating an environment that promotes innovative thinking on the lines of science & technology.
- Focusing on making CREST more impactful, result-oriented & develop more of Innovation Council is to provide stimulus, focus & direction on innovation, channelize it, evaluate ideas, nurture creation of new solutions, and to guide introduction of these solutions in the market. Therefore, the Council plays a crucial role in the Innovation management process.

**Edit Team:** Dr. Vaidya helped us understand the crux behind KPIT’s CREST, Please tell us about different research areas that we focus on currently? Who provides guidance or direction to CREST?

**Krishnan:** Our focus is on nine broad research areas across Safety, Emissions, Efficiency, Big Data, and Cloud. KPIT’s management has setup a body called ‘Innovation Council’. Its members include a group of senior level officials who are veterans from various industries, few KPIT Board members & top management. The objective of Innovation Council is to provide stimulus, focus & direction on innovation, channelize it, evaluate ideas, nurture creation of new solutions, and to guide introduction of these solutions in the market. Therefore, the Council plays a crucial role in the Innovation management process.

**Edit Team:** Please elaborate on innovation management and process from idea inception to execution.

**Krishnan:** KPIT has taken lot of steady and cautious steps in transforming from a predominantly service oriented company to a technology company, & innovation management has been crucial. We have identified 3 major phases for innovation management – **Ideation:** Having a funnel with lots & lots of ideas, **Incubation:** Shortlisting worthy ideas, funding them & ensuring its implementation through a lean mechanism & **Business Use case:** Converting these ideas into POCs (Proof of Concepts).

We follow a standard process at each phase to ensure that right ideas are funded & implemented.

Initially, there was no central repository for employees to convey their ideas to the management. So we came up with a concept of having a dedicated space on our internal portal through which employees from different locations can easily share their ideas that can be assessed, discussed, & tracked.

An idea having business potential is then made fossilized and casted in concrete through discussions and deliberation on development costs, similar existing products, time required etc. It is then taken to the Innovation Initiative Team (IIT) comprising of SMEs, sales personnel, & business heads. Upon their inputs, the idea is further evaluated by Dr. Vaidya along with top management and decision is taken on funding it. Once the decision is taken to fund the idea, the original innovator is allocated a separate project to implement it. Thus, its POC is developed.

While the idea is getting matured through discussions, a prior search is done to ensure that the idea is not patented already & is not infringing into anybody’s intellectual property. On ensuring this, the worthiness of the idea is checked for filing a patent upon which the appropriate action is taken.

**Edit Team:** What are the different initiatives undertaken by KPIT to align KPITes to the organization’s vision and mission of innovation?

**Krishnan:** We have undertaken many initiatives to promote innovation. Some of them include - Central repository for employees to share their ideas and opportunities to present them to the Innovation Council. Also, multiple sessions are conducted for select senior employees that focus on converting a potential idea into a business opportunity. Induction sessions for new employees, engaging KPITes to watch demos to understand more about innovation & technology, monetary reward to employees for filing a patent, regular sessions on latest trends in science & technology, offering internships, forum to solve the queries of employees related to Patents, etc. are a few on-going initiatives to promote innovation at KPIT.

“There are a lot of new things that we will implement very quickly. The objective is to generate new & new ideas, identify innovators, do proof-of-concepts, show them to our customers & bring those to the market”

We have well defined process for employees to share their ideas, business leaders to assess them & to ensure that worthy ideas get converted into a Business Use case