IMIESA speaks to Dinesh Chaithoo, MD of Chaithoo, about the company’s expanding business model, which includes a growing footprint in Africa for a range of solutions founded on civil engineering design and construction, contract law, and project management. Infrastructure asset management is an overriding focus.

What is your current and future business strategy? DC Founded in 2013, Chaithoo is foremost a consulting engineering firm; but, in today’s world, that must dovetail with a broad spectrum of other disciplines, like IT, project management and transaction advisory services. These are all areas in which we currently specialise. In terms of IT, we work with the leading proprietary design packages, in addition to developing our own tailor-made software. In the transaction advisory space, I am one of three locally based practitioners registered with International Advisory Experts (IAE). This is a global alliance of financial and consulting firms that are committed to providing clients with specialist solutions for their international business requirements, whether from a legal, financial or tax perspective when it comes to transacting in the intercontinental market. That’s a space in which South African companies need to grow, particularly in Africa.

To date, I’ve visited the majority of the continent’s 56 countries, so that gives me good insight into current and future opportunities. My IAE involvement – combined with senior management experience in roads, structures and bridge design with two major global consultancies – has been particularly beneficial.

Chaithoo currently has a number of projects on the go in Africa. We also have a registered office in Yaoundé, Cameroon. Among other endeavours, the government of Cameroon has appointed Chaithoo to assist in a transaction advisory capacity regarding infrastructure delivery ahead of their hosting of the 2019 FIFA African Cup of Nations tournament. Roads and bridge design has been a fundamental passion throughout my career, and expertise in this area has resulted in my branching out into forensic engineering investigations. A past example is an assignment in Christchurch, New Zealand, where I was tasked with assessing the damage caused to municipal infrastructure following a major earthquake in 2010.

What are your thoughts on education? It’s what defines us, and there are no limits with education. I’ve shared my experiences by delivering a number of technical papers locally and internationally, as a registered professional. In addition to this, I feel a responsibility to inspire young engineers, as well as the full spectrum of aspiring artisans and specialist engineer subcontracting trades. For me, education is an absolute passion and my time outside of running a growing consultancy is spent making sure that those who have the vision and ability have the chance to grow.

I teach mathematics and physical science at our offices next to a local high school, where I place this science in a practical perspective as we make assessment geometry and trigonometry are not purely puzzles to be solved; they, along with many others, are ancient tools that have built everything we see around us. I’ve also been a Unisa lecturer for close to six years, teaching Foundation Engineering IV and Geometric Design IV, and my contract has recently been extended to October 2021. It’s such a rewarding experience to see young learners achieve their full potential.

How would you define entrepreneurial excellence in engineering? Applied experience is the foundation. The rest boils down to innovation. I always say that if you have a dream, pursue it. That’s what I want for Chaithoo: to build a business that stays behind an enduring legacy of successful outcomes. As civil engineers, we have a social responsibility to build lasting infrastructure. Those of us who’re also entrepreneurs have an additional obligation to assist developing SMME consulting and contracting companies. Many of them are struggling in the current business climate and would definitely benefit from mentorship and professional advice.

You’ve won a number of global excellence awards. What’s the significance for your business? We’re proud of the awards because they are independent and unbiased endorsements of our successes to date. Winning these awards motivates us to excel. Examples include the Innovation and Excellence Awards 2016 in the UK, where I won in the category Excellence in Engineering Consulting Services – South Africa (Africa and Middle East regions). We also won at the International Advisory Experts Awards 2017 and 2018 and at the ACQ5 Global Awards 2017 and 2018 (Gamechanger of the Year). Chaithoo won the ACQ5 Global Awards 2018 in the category Consultancy of the Year (Infrastructure Asset Management). We have also received recognition with an award from Advisory Excellence 2018. Most recently, I’ve won the Acquisitions International Leading Advisor Awards 2018 for Leading Civil Engineering Expert of the Year – South Africa.

So, we know that our vision and mandates are well aligned. As a mentor and coach, I have always advocated that one should never give up on whatever you aspire to achieve in life.

Is Chaithoo ISO compliant? We are in the process of obtaining our ISO 9001: 2015 certification and expect this to be awarded in October 2018. The Stage I audit process through SABS was successfully passed on our first attempt. Having ISO 9001 underscores the fact that all our systems are quantifiable and directed towards achieving set outcomes in the most efficient way possible. That’s particularly important when providing an infrastructure advisory, design and project management service.

Why is asset management so critical for sustainable infrastructure delivery? South Africa’s backlog in terms of new infrastructure requirements grows daily. When you add the hundreds of billions of rands required to repair and update existing infrastructure, then the problem can seem insurmountable. It’s not, but it does require a specialist approach so that we can accurately map existing services, like roads, water, sanitation and electrification, and allocate maintenance budgets and project implementation timelines. That, in turn, needs IT systems that provide a constant flow of data, which can be accurately analysed and interpreted. The source of these smart solutions is often drone technology, as well as mobile apps linked via GSM and/ or GPS.

South Africa’s municipalities are urgently in need of technical engineering skills. To address this, the Department of Cooperative Government and Traditional Affairs recently started sending technical task teams to assist the worst-affected municipalities. It’s a great start that will help to alleviate construction tender bottlenecks that currently hamper service delivery.

On the upside, South Africa’s infrastructure is still the most advanced in Africa and well supported by government funding. However, for many other African countries, a very low tax revenue base often means that the only available funds for infrastructure must be sourced via services such as the World Bank or private sector investors linked to industries like mining and agriculture. Either way, once a project matrix has been established, the next steps are design and build, and construction management. Once the structures are completed, though, it’s essential that a comprehensive lifecycle maintenance regime be adhered to. That ensures the best possible return on investment, which will be heavily influenced by the design approach and materials specified up front.

For both new and completed projects, real-time IT interfaces between the municipality and asset management specialists will add tremendous value. An example of a custom-built program is a performance-based software tool that continually updates the state of a city’s roads network and compares it against preset data.

In South Africa and other African countries, we need to take care of our infrastructure and make sure it lasts. 36