

# **Delivering Sustainable Surveying Engineering Business in the 21st century - The Entrepreneurial Approach**

**Joseph Owusu-Awuah (Ghana)**

**Key words:** surveying engineering, entrepreneurial approach, business

## **SUMMARY**

This paper examines how an enterprise within the field of geomatics engineering can continue to be in business by leveraging the entrepreneurial approach. The paper illustrates how an entrepreneurial approach is imperative for prosperity in the 21st century. Drawing analogies from vehicles and drones, it underscores the necessity of maintaining a diversified project portfolio, akin to a vehicle's dependence on four wheels and a drone's requirement for four propellers. The paper emphasizes a cyclical cash flow model, ensuring that the loss of a single project does not jeopardize the stability of the surveying engineering business.

Key actionable strategies are outlined: client identification, inclusion in vendor lists, proposal writing, expressing interest in capital projects, forming versatile surveying teams, and adeptly managing value and risk across multiple projects. We underscore the significance of understanding the client's value matrix, ensuring alignment of services to highlight the firm's relevance and value addition.

The merits of this sustainable approach are manifold, offering clients optimal value for money, reducing unemployment rates among surveying engineering graduates, enhancing the visibility of surveying engineers in capital projects, ensuring the availability of geospatial solutions, and guaranteeing sustainable employment within the sector. Moreover, an emphasis on technological advancements ensures timely, cost-effective, and high-quality service delivery.

However, the journey is not without challenges. The paper identifies contractual bottlenecks and funding insufficiencies for technology acquisition as primary impediments. By adopting a strategic, informed approach, surveying engineering businesses can navigate these challenges, ensuring long-term sustainability and significant contributions to the industry and broader economy.

---

Delivering Sustainable Surveying Engineering Business in the 21st century - The Entrepreneurial Approach (12577)  
Joseph Owusu-Awuah (Ghana)

FIG Working Week 2024

Your World, Our World: Resilient Environment and Sustainable Resource Management for all  
Accra, Ghana, 19–24 May 2024