Innovation Series - 1: Role of the State

Details
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Kibet operated a technology firm that specialized in mobile app development for insurance firms. Formed four years prior, the business expanded steadily at a healthy rate of 30% annualized growth.

Kibet decided to undergo a strategic planning initiative as the firm entered its fifth year. The whole team met with a consultant and they pondered the company’s next moves. One persistent idea permeated many discussions: should the growing firm plan for a future relocation to Konza Techno City or remain on Ngong Road in Nairobi?

As Kenya seeks new avenues for growth in the years ahead, we will experience new competitive threats from the region and beyond. Developing nations face acute pressure to innovate and foster creativity in order to vie for investment, tourists, and customers for its products.

Interestingly, state actors, from local and regional governments all the way up to national agencies and ministries, hold massive sway over whether an industry becomes innovative and thrives. First, authorities must make the tough choice over which sector to promote. Often governments try to support multiple industries with mediocre assistance that fails to materially boost any instead of providing robust structure and sustenance for one economic segment that thrives.

Innovative hubs of excellence exist in the world in clusters, as delineated by researchers Gerald Carlino and William Kerr. The four East Asian “tigers”, or “economic miracles”, that include Taiwan, Singapore, Hong Kong, and South Korea, placed substantial state support behind various manufacturing sectors through export led growth. Cleveland, Ohio, in the United States exists as a global medical research hub. San Francisco and Bangalore thrive as technology capitals of the world. London and New York flourish as international financial focal cities. The global fashion nucleus revolves around Milan and Paris while entertainment mainly originates from the Los Angeles and Mumbai areas.

Nairobi, Mombasa, or Kisumu should best be known for which economic sectors? Already Nairobi prospers as a regional medical care and technology hub. Mombasa fluctuates as a core for regional tourism and Kisumu as a fishing export center. But if one of our main cities desires to compete as a global, rather than area hub, then which industry should all levels of Kenya’s government select and focus on predominantly? Clearly the Government of Kenya extends growing support for entrepreneurship in the technology sector.
Will Kenya thrive as the Silicon Savannah on the global stage? So Kibet and his staff must investigate whether the Kenyan Government’s response and plans for innovation in the technology sector will significantly enhance a robust innovative cluster in Konza Techno City.

In analyzing any local and national government plan for an innovative industry, investors and entrepreneurs must look at eight main factors. First, do substantial education institutions and centers exist that specialize in the particular industry that can feed high-end graduates into the sector? In Zambia where copper mining underpins the economy, the government there operates a large mining college. Here in Kenya, do enough high quality technology training centers and universities exist with strong enough programs to supply into a robust innovative technology industry, as an example?

Second, does the government adequately regulate competition and protect patents or instead does it favour one market player above others? Recent combined research from MIT, Harvard, University of Pennsylvania, and Stanford shows that when governments extend subsidies and privileges to dominant market players, it dramatically lowers the innovation performance throughout the sector as big firms become comfortable and less reliant on market pressures while startups cannot fairly compete. American and European governments provided sweeping support for large industries, like the automotive sector, during the 2008 global financial crash that hurt sector innovation and growth. Also, research from Deepak Hegde and Hong Luo shows that when a government’s patent office proactively publicly releases patent details even before approval, it boosts innovation in economic hubs by greater access to information.

Third, do enough customers exist for products and services produced in the innovation hub? Despite government support, industries still need purchasers. How does a government support client acquisition? The Government of Kenya, as an example, actively supports the tourism industry in pitching to prospective clients abroad.

Fourth, does substantial financing thrive for research and development in the sector? Firms need financing. Is the respective government’s debt and equity laws liberal and do enough financiers put money into the industry? In addition to private funding, governments also sometimes choose to fund business operations for targeted industries directly. However, Daron Acemoglu and his colleagues’ research uncovered that government funding for private sector operations actually lowers innovation and creativity in the sector. Meanwhile, government funding exclusively earmarked for research and development significantly boosts an industry.

Fifth, most observers understand the important role that infrastructure building plays in growing an industry. In Konza Techno City, will adequate roads, water, electricity, fiber optic connections, etc., exist with enough quality? Sixth, innovation hubs require political stability so as to not frighten off investors
and not force top talent to flee the country. Commensurate with political stability, additional research by William R. Kerr details how liberal immigration policies to enable the inward migration of skilled workers must exist or else innovative industries cannot thrive. His research also delineated how staffing in technology firms in the United States shockingly comprise over 25% foreign highly skills workers.

Seventh, governments must provide safety and environmental regulations backed up with enforcement for the respective industries. As an example, Chinese and Bangladeshi governments previously faced criticism for not historically enforcing safety regulations in their respective manufacturing industries. Eighth, do governments support macroeconomic policies that foster favorable macroeconomic conditions, such as capital markets liberalization, low interest rates, no foreign exchange restrictions on size of transfers, etc.?

Should Kibet plan for future relocation to Konza Techno City? Share your ideas on the Government of Kenya’s support for innovation in the technology sector through #InnovationForum on Twitter.

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