

Productive Employment
December 2016

Interim findings

The IT sector in Kenya

The research project 'Multipliers for employment creation: the case of the IT-industry' aims to produce and disseminate evidence-based knowledge on the learning factors associated with venture performance and entrepreneurial development, as well as the mechanisms for entrepreneurial learning (both in terms of skills acquisition and learning from failure experiences). It focuses on IT enterprises, enterprises in poverty settings, and the social enterprises that support their growth and financial performance. Two qualitative studies were conducted with emerging entrepreneurs affiliated with iHub and Nairobits in Nairobi, Kenya, which constitutes the main study, as well as studies in South Africa and Bangladesh. The following are the interim findings and policy messages from the mid-term report.

Interim findings:

- The study found that IT entrepreneurs in Nairobi tend to attribute (near-)failure (which is an important source of learning for entrepreneurs) to external circumstances, rather than their own mistakes, resulting in, at most, incremental change and limiting growth and performance. Entrepreneurs who engage in in-depth reflection on their failures or who have a strong learning orientation are more likely to engage in transformational learning and make transformational changes in their business models and practices, promoting a trajectory of productive employment and leading to high economic growth and performance.
- The study identified additional conditions under which transformational learning and organizational change after (near-)failure lead to high performance and growth: overconfidence appears to increase growth, but reduce economic performance, leading to unproductive growth, whereas a high sense of ability and competence ('self-efficacy') contribute to growth and performance.
- Very few entrepreneurs in poverty settings scale up, limiting growth in employment and income. The study found that successful entrepreneurs in resource-constrained settings switched their networks over time, from family and close friends to successful business peers. These findings indicate that trusted business networks are important for promoting growth, as well as for facilitating a range of psychological changes, enabling micro-entrepreneurs in poverty settings to grow successfully through each entrepreneurial stage.
- The study found that incubators can support IT enterprises to create employment. During early development (stage 1), the successful incubator in this study took on a convening role, uniting IT firms and (aspiring) entrepreneurs in a physical meeting space. This reinforced relationships among entrepreneurs and provided a space where new entrepreneurs could learn about starting a business. Later, in the development (stage 2), the incubator enabled members to take the lead on organizing activities and coordinating projects. The small physical space created a social space for peer-to-peer support (serendipitous encounters), social capital and a community of practice. Early on, the incubator integrated international ties, strengthening its local legitimacy; however, the international relationships were not mature enough to produce clear value from the collaborations for local parties.
- CBOs are important for (youth) entrepreneurs in resource-constrained settings. They provide entrepreneurship training and business loans at low or no interest and empower micro-entrepreneurs by building confidence and resilience and nurturing shared values, which supports their success.

- Under some conditions, social entrepreneurs created unintended side effects, triggering debt-spirals and debt-traps for entrepreneurs and their families, as well as entrepreneurial failure.
- The study found that, although devolution (the decentralization of government) has had positive outcomes for inclusive development in Kenya (such as improved interaction between local governments and local people and the stimulation of local development with resources coming to the grassroots), it has had few positive effects for IT entrepreneurs. Rather than stimulating inclusive growth, it has led to ethnicity-based nepotism and corruption at the local level, which is aggravated by a lack of professional implementation, specifically confusion regarding responsibilities. These effects were reduced by an increase in accountability, especially when transactions were recorded electronically (digitization).
- Local IT enterprises have circumvented the potential negative effects of devolution and increased their access to government through network-based growth mindsets, by actively adapting their networks to the respective county (e.g. by widening their networks to include those of the tribe of the respective county leaders), and by building consortia with entrepreneurs from other tribes.

Policy messages:

For social enterprises (incubators, CBOs and others) and government programmes

- **Improve training programmes for entrepreneurs:** The research suggests many (evidence-based) improvements for entrepreneurial training programmes and curricula, including those taught by social enterprises (incubators, CBOs and others). Critical reflection, for instance, on failures or near-failures, confidence building, a learning orientation for entrepreneurs, and developing a sense of self-efficacy and confidence (while avoiding over-confidence) should be integrated into the training and mentoring of entrepreneurs at various stages of their development.
- **Focus on networks and community building:** Social networks are key to enterprise development. For entrepreneurs in resource-constrained settings, networks with other successful entrepreneurs are important. For IT entrepreneurs, the creation of physical and social spaces for network building, partnering, and learning is productive. Social entrepreneurs should nurture such environments and offer (improved) development and training programmes to nurture and support IT entrepreneurs and entrepreneurs in poverty settings.
- **Train social enterprises in business model innovation and practices towards self-sustainability:** Social enterprises could be offered some help to strengthen their training material for entrepreneurs. One of the main success factors for social enterprises (such as incubators and CBOs) is the human and social capital of their founders. These social enterprises should be made self-sustainable, at least partly, to leverage these factors as much as possible, rather than remain dependent on donor funds. This would give them more control over development priorities. This could be supported by training and development programmes for incubators, CBOs and others to help them design, implement, and scale up business models and practices for self sustainability (or partial sustainability).

For governments and policymakers

- **Create incentives for international companies to locate close to incubators for local interaction, learning and capability building:** Access to large companies, such as Google, provide local IT enterprises with support, sales opportunities and even potential acquisition opportunities. Thus, policymakers could create incentives for large (foreign) companies to base their offices close to existing or new incubators to facilitate sustained, close interaction with local IT entrepreneurs to foster thriving local communities of enterprises/hubs.

- **Encourage more incubators outside Nairobi for productive growth:** The government of Kenya could foster and support enabling environments by setting up entrepreneurial incubation centres not only in the capital, but also in other smaller towns. Governments should also foster longer-term linkages among young entrepreneurs and other entrepreneurial bodies and large organizations at both national and international levels to open up more entrepreneurial funding and learning opportunities.
- **Support incubators by providing effective physical infrastructure:** In order to enable a well-functioning IT enterprise ecosystem, good physical infrastructure, including high-speed internet, is essential. The government should provide financial and infrastructure support for the IT sector.
- **Increase the digitization of government services:** It is recommended that government services in Kenya be digitized, particularly in rural counties, in order to make them more transparent and reduce corruption.
- **Reconcile ethnic divisions at the local level for productive growth:** Whereas at the national level, various mechanisms for balancing ethnic groups have been attempted, at the local level, a similar approach is needed to ensure inclusive development.
- **Support entrepreneurs to build broader networks for productive growth:** Policymakers should support the interaction of entrepreneurs across regions and tribes to facilitate the scaling up of productive IT enterprises. Incubators, CBOs and others that support entrepreneurs can play a significant constructive role here.

Knowledge products:

- The research project, together with its NWO-WOTRO partners and the Rotterdam School of Management, London School of Economics (RSM/LSE) global social innovation lab, an integrated global network of PhD trainers and researchers on (social) entrepreneurship, is launching leading business schools and incubators in Kenya, South Africa and Bangladesh, as well as training programmes for (social) entrepreneurs. This is part of knowledge-sharing and the implementation of the key recommendations of the mid-term review of the NWO-WOTRO Program Committee (which echo the key recommendations of the EU-African International Advisory Committee). This aims to support the long-term, self-sustainability of the next generation of local researchers and trainers in (social) entrepreneurship and of social enterprises (incubators, CBOs and others) that nurture IT entrepreneurs, entrepreneurs in poverty settings, and so on, as well as growth at the micro-level (local enterprises, productive employment, incomes) and macro-level (regional and national economic growth, and poverty reduction).
- Barkema, H. & Le Grand, E. (forthcoming) *Understanding entrepreneurial trajectories in IT in Kenya: transformational learning, change and growth after (near-)failures*. Paper.
- Oloo, C.; Alexander, C. & Barkema, H. (forthcoming) *Entrepreneurial learning processes after business failure: growth paths for resource-constrained entrepreneurs in Kenya*. Paper.
- Alexander, L. & Barkema, H. (forthcoming) *Frugal Innovation: empowering unlikely innovators at the BOP*. Paper.
- Huang, J. (forthcoming) *Market devices: the making and unmaking of ICT entrepreneurs*. Paper.
- Busch, C. & Barkema, H. (forthcoming) *Dynamic social capital, networks, and community-enabling leadership: incubators in an emerging economy*. Paper.
- Busch, C. & R. Mudida, R. (forthcoming) *Institutional change, dynamic social networks, and enterprise growth: the case of Kenyan IT-ventures*. Paper.

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