



The challenges facing entrepreneurs wanting to move through the phases of innovation from research to market. Lessons from the experience of Yeigo Communications.

Prepared by the Western Cape Economic Development Partnership (EDP)

Outcome

This case study illustrates some of the challenges facing entrepreneurs through the phases of moving from innovation and research to prototype development, market development and finally commercial development. It provides lessons learned in order to help other entrepreneurs facing similar challenges.



Challenges

In the work of the EDP around innovation, a host of challenges have been identified, but the following four stand out:

1) Gaps in Funding for Innovation

There is a shortage of gap financing for start-ups (technology based and other start-ups), particularly for those at the idea stage (with or without working prototype), proof of concept and early operational stages.

2) Unsupportive Regulatory Environment

The IPR Act and Exchange Control Regulations

impact on technology licensing and commercialisation efforts.

3) Inadequate pipeline of projects

This is attributed, amongst other things, to low levels of entrepreneurship and lack of investment readiness.

4) Coordination and collaboration deficit

There is a collaboration deficit as a result of divergent and competing objectives, limited awareness of the potential value and benefits of collaboration, bureaucratic cultures.

Acronymns used in this Case Study:

SPII = Support Programme for Industrial Innovation

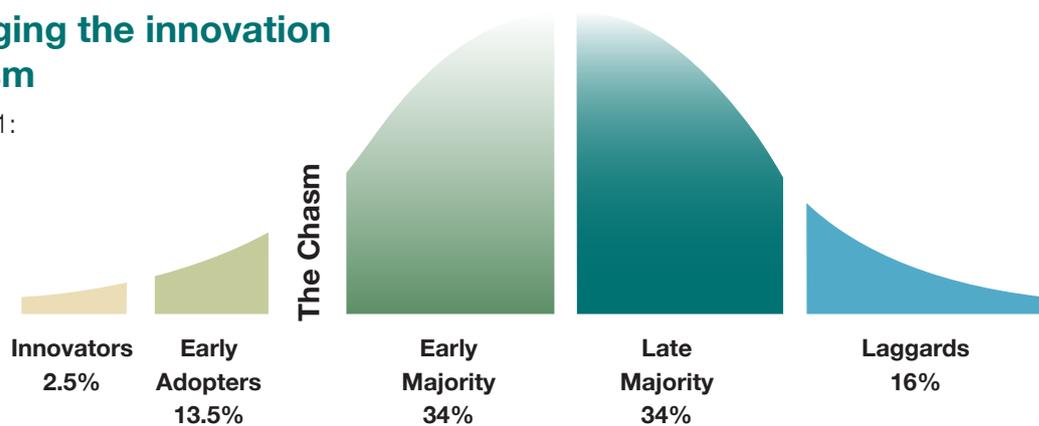
IP = Intellectual Property

VoIP = Voice over Internet Protocol

SMMEs = Small, Medium and Micro Enterprises

Bridging the innovation chasm

Figure 1:



ROGER'S INNOVATION ADOPTION CURVE

Trying to convince the mass of a new idea is *useless*.
Convince *innovators and early adopters* first.

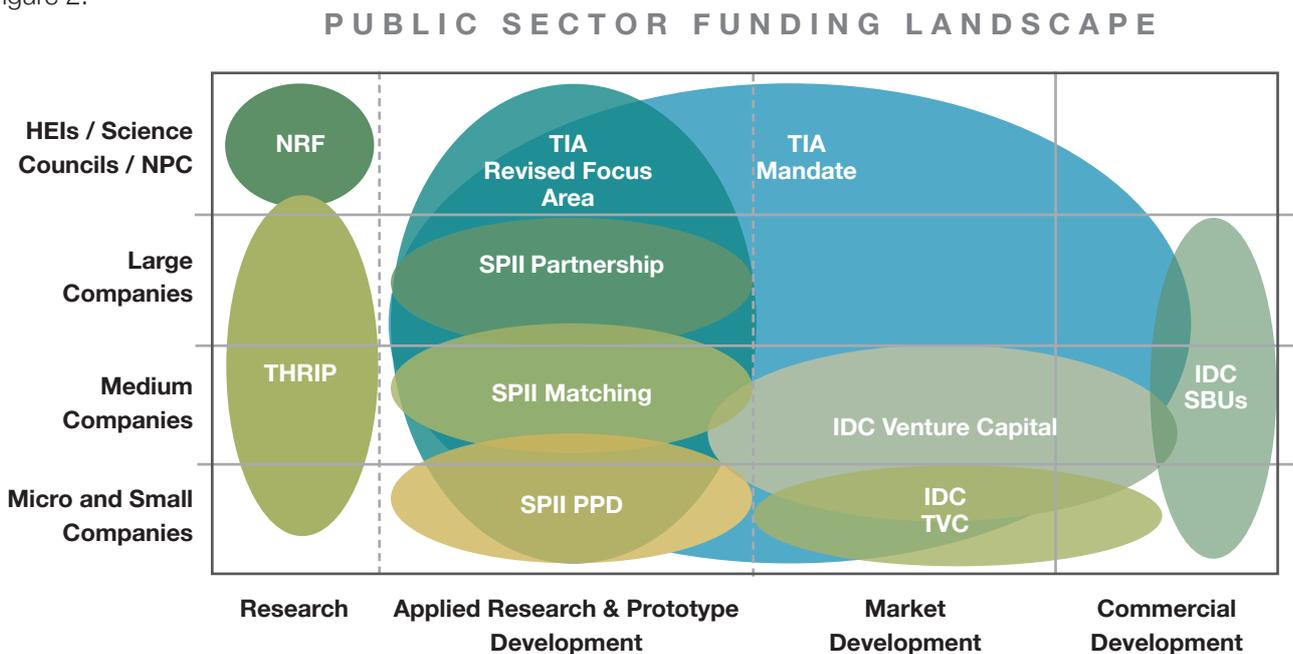
Source: Everett Rogers, Diffusion of Innovations (1995)

The system is currently organised using the technology adoption cycle. The technology adoption curve applies primarily for introducing technology to the market. One of the critical themes impacting innovation is access to funding. Geoffrey Moore introduced the concept of a chasm – “the death valley” in which hundreds

of start ups fail because their products fail to make it to the mainstream consumer market. The chasm can be viewed as a death valley of ideas/inventions/innovations that fail to see the light of day. In a better-organised system, death valleys wouldn't exist.

IP Development & Commercialisation

Figure 2:



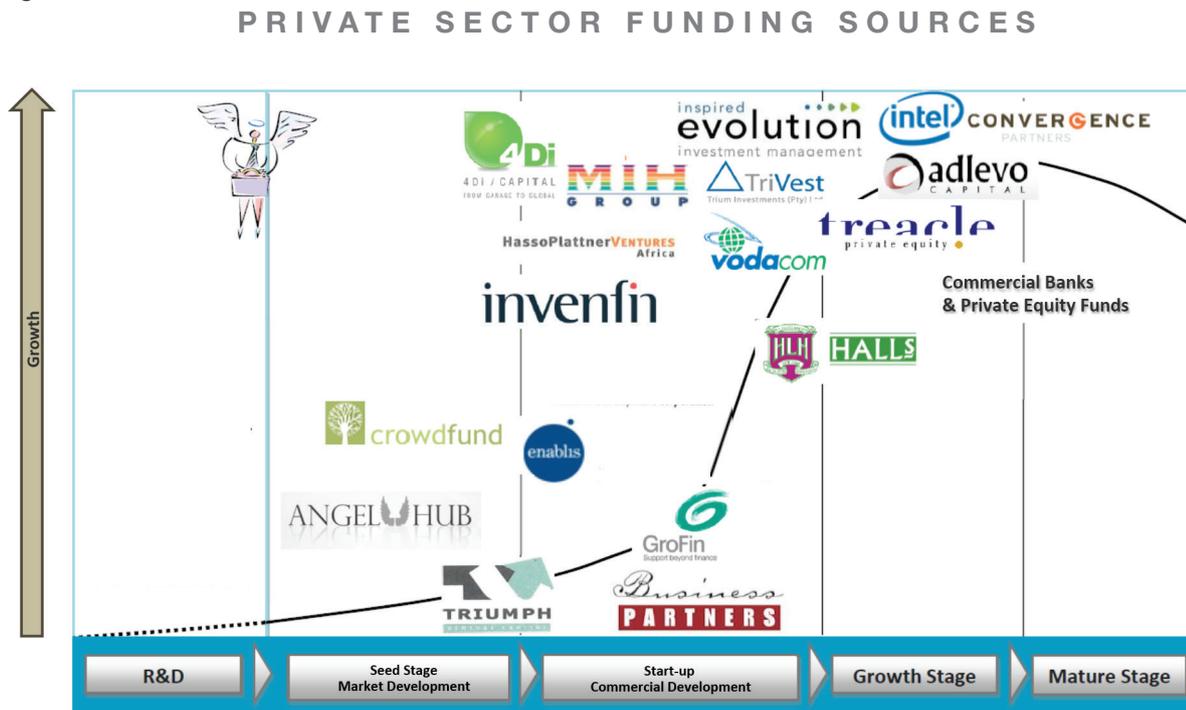
Source: IDC

Figure 2 demonstrates at the bottom of the previous page demonstrates the inter-linkages of the various public-sector funding bodies in

the system. The question to ask is whether they operate in an integrated manner? And if so, why do innovations fail to see the light of day?

VC Funding

Figure 3:



Source: IDC

Figure 3 illustrates the private sector funding perspective. The question here is whether this feeds into the public sector, and whether the two streams work together?

challenging, and in 2008 Yeigo partnered with a Swiss telecoms company called Telfree.

The Funding Challenge



Rapelang Rabana

Background

Rapelang Rabana was a recent graduate in 2005 when she co-founded Yeigo Communications, a company that develops software for telecoms-related services. Getting from idea to market was

When Rapelang started Yeigo right out of university, she and her co-founders had no networks. They initially approached banks and NGOs, but the banks required historical information, collateral and a more tangible sense of value than intellectual property, something that Yeigo could not provide. Applications to government schemes were also unsuccessful as they had implementing partners within banks so it came back to the

same things and didn't work.

Trying another route, the Yeigo founders looked for mentorship and advice. They built relationships with people who saw that they were serious and opened their networks to find them an angel investor.

At the time, the DTI, through the SPII programme, had a half a million Rand funding grant but the funding was retrospective – you had to spend to get it. The angel investor favoured this but the main problem with SPII was that the relationship needed full time management, and the cash flow was late and cumbersome. The administrative effort cost too much in time. Another problem was that Yeigo had to stick to what they had specified in the SPII application document. The lack of flexibility and cost in efficiency meant that they never applied to the SPII again.

Yeigo looked for venture capital funding but most were series B funding post revenue that were not supportive of the entrepreneur stage. Rapelang realised that unless you have social options, or you are bootstrapping, you can't get over the funding gap. Rapelang believes that there is not enough depth in venture capital – they steer to private equity – and the Yozma model in Israel is worth looking at. It started 20 years ago with a matching fund of R100 million and various tax incentives and flexible terms. It worked with local skills and the government didn't make money but de-risked the market to attract skills. Now, the VC market is booming in Israel.



The lesson from Yeigo was that while funding tends to be long-term, innovation very quickly results in changes to ideas and ways of doing things. Processes do not remain static, so tying the funding to what was written six months previously defeats entrepreneurship.

The Regulatory Challenges

Yeigo was operating in the telecommunication

space and it was hard to access adequate accounting services. As young people, the Yeigo founders struggled to open a business account and it took them eight to nine months to get an embossed card to buy online.

IP and forex regulations are unattractive to investors outside South Africa and Yeigo had problems in terms of forex when they tried to do a transfer of IP with an American company. There are a lot of IP and forex laws that complicate the funding process if you are looking outside South Africa this deters foreign investors.

In terms of labour laws and hiring, timing makes it hard, as the Home Affairs process is cumbersome, so unless someone really loves South Africa they won't stomach it. The uncertainty and sluggishness of it is negative.

VoIP was being legalised in the South African telecommunications environment in 2005 but the regulatory steps to enable fair competition to happen weren't in place. The wholesale rate was higher than the retail rate so operators excused themselves from participating. Yeigo looked long term and had to package niche products to niche customers – functionality and features were more valuable than cost structures.

Telecommunications was slow and South Africa is paying the price now in comparison with Kenya. The fact that Google and many technology multinationals has established its headquarters in Kenya shows that South Africa has lost the edge. Internet access is poor in South Africa, with 40% of youngsters having access to the internet, while in Kenya 70% of urban youngsters have access.

One of the things holding back SMMs is lack of a mobile money platform.

A ubiquitous payment system is needed and relying on EFTs and credit cards isn't good enough. SMMs need to be able to collect small

amounts of money without face-to-face interaction and credit cards.

When M-Pesa started in Kenya 10% of the population had access to the banking system. In contrast, South Africa had an established first world system that overrode the third world economy. When M-Pesa started, Safaricom had 70% of the market share. In South Africa Vodacom and MTN share the market and no-one will inter-operate as they all want to dominate. As an entrepreneur, Rapelang isn't tempted to use a mobile money platform unless there is inter-operation.



The lesson from Yeigo is that in order to compensate for an unfavourable regulatory environment they looked long term and packaged niche products to niche customers. A further lesson is that we need a critical mass from the beginning – we need to make sure everyone can get into the mobile money platform from the beginning – not just Nedbank customers, otherwise we are back to the same problems.

The Challenges of the Startup Phase

Without funding Yeigo wouldn't have been able to access the services of an accountant and a lawyer. Rapelang's experience was that accountants and lawyers are not geared to startups – as a startup you can't wade through a 30-page contract. Yeigo would have benefited if a commercial lawyer had looked at the bare minimum that Rapelang and her partners needed in order to protect themselves – they didn't need the Rolls Royce service. They have confidence now, but at that stage, because they were young they didn't have the confidence to say what they needed.

Rapelang's advice is that entrepreneurs need to prepare for exit, and to prepare for investment.

In terms of business fine-tuning, Yeigo had no access to a Chief Financial Officer as they couldn't hire one, but this was something that they could outsource.



The lessons from Yeigo include:

- It is advisable to keep overheads really low – to work from home and secure an address to receive post. You really don't need fancy offices and a personal assistant.
- Avoid committing to employment contracts and fixed costs without the revenue needed to cover the costs. Hire slowly and fire fast. Take a lot more time, and do practical testing before you hire. Be very clear about job requirements so you know if they are fulfilling what is needed. If a relationship is not working out then get rid of a weak employee quickly, as it destroys morale.
- Everything takes a lot longer than you think. It takes a good three years to establish yourself, and seven years to get to success. It takes three years to have a network in the market. It takes a long time to build expertise.
- Every day Rapelang doubted, but she kept going. She never had any assurance or clarity about anything she did. You have to be confident otherwise no one will be confident in you.
- Give yourself a timeframe within which to do something and don't cancel because of a bad moment.
- Spend a lot more time thinking through and processing a decision before acting. Too many people are slow to think and fast to act. You need quiet time to think.

The Challenges of Collaboration and Partnership

In Rapelang's experience choosing a partner is the singular critical thing to do. Partnerships break businesses all the time. You need to look for partners who like doing what you don't like doing. You and your partner must have differentiated skills but the same values and expectations e.g. in terms of timeframes, how long are you prepared to live on bread and peanut butter? Ask each other whether you are expecting to have money at three years or at five years. Clarify how much work you will put in. Will it be part time or full time?



The lessons from Yeigo include:

- Choose your partners based on your experience working with them in a real life context rather than because the partnership looks good on paper.
- Allow for change. The shareholders agreement should be structured in a way that allows for a change in circumstances. In Rapelang's opinion anyone who leaves within the first three years isn't entitled to a major stake.

Conclusion

The age and lack of experience of the founding partners of Yeigo meant that they did not have the networks and historical information needed in order to get access to funding. Their lack of confidence meant that they didn't speak up about the services that they needed and those they could do without. They found a partner because having founded Yeigo with friends with the same skills, they lacked the differentiated skills that they needed. They responded to regulatory challenges by packaging niche products to niche customers.

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