How can government support entrepreneurs?
Professor Erkko Autio
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After the European Commission unveiled its Single Market Strategy in October 2015, Professor Erkko Autio examined the kinds of policies modern entrepreneurship needs to flourish in an increasingly digital marketplace, and developed three distinctive definitions for young, innovative firms.

Businesses don’t exist in a vacuum: they need investment, expertise and support to reach their full potential. Government policy plays an important role in creating conditions in which businesses thrive – as long as the policies are fit for purpose.

So what policies does modern entrepreneurship need in order to flourish in an increasingly digital marketplace, and how does policy apply to different types of new businesses?

In my recent policy report for EU DG GROWTH, I define three types of young, independent businesses: start-ups, scale-ups and unicorns. A scale-up is an evolution of the start-up: while still relatively new, it’s settled on a scalable business model, attracted at least €1 million in venture capital funding, and is now entering a period of extreme growth and assessing its next steps.

A “unicorn”, essentially, is the dream: a scale-up valued at more than €1 billion. These are the Ubers, Snapchats and Airbnbs of this world: young, thriving, and – almost without exception – utilising a digital-centric business model.

<table>
<thead>
<tr>
<th>Firm definition</th>
<th>Startup</th>
<th>Scaleup</th>
<th>Unicorn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm type</td>
<td>Independent</td>
<td>Entrepreneurial</td>
<td>Entrepreneurial</td>
</tr>
<tr>
<td>Age</td>
<td>Up to six years old</td>
<td>Up to ten years old</td>
<td>Up to ten years old</td>
</tr>
<tr>
<td>Growth Orientation</td>
<td>Strong</td>
<td>Strong</td>
<td>Strong</td>
</tr>
<tr>
<td>Monetary identifier</td>
<td>15% operating profits spent on R&amp;D</td>
<td>Attracted more than €1 million of venture capital funding</td>
<td>Valuation exceeds €1 billion</td>
</tr>
<tr>
<td>Example</td>
<td>Deliveroo</td>
<td>KeyedIn</td>
<td>Uber</td>
</tr>
</tbody>
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Digitalisation

Before discussing policy, it’s important to discuss the impact digitalisation, particularly Web 2.0 – the interactive internet of on-demand services and user-generated content – has had on entrepreneurship.

Digitalisation has transformed traditional industrial value chains. Where once companies made and sold physical products, modern entrepreneurship revolves much more around technology platforms; where once we had customers, now we have users.

Additionally, digital technologies have made physical products more flexible than ever, breaking traditional couplings between product and function. For example, a running shoe embedded with an accelerometer and microchips, linked to the user’s smartphone and supported by a fitness-based web service, is no longer simply a running shoe: it’s a component in a lifestyle technology ecosystem.
Old notions of linear and vertical value chains are less relevant in an environment where value increasingly revolves around platform-centric innovation ecosystems. Instead of vertical ‘upstream’ and ‘downstream’ value chains, value creation becomes horizontal and distributed, with the platform and shared key technologies at the core, and users and suppliers in the periphery.

Another effect of digitalisation is that it has dramatically lowered the cost of creating new bundles of product and service features, making innovation and experimentation cheaper and scale-up easier. Continuing the running shoe analogy, the platform owner might launch an app allowing users to compete with one another in virtual marathons: with very little investment, they’ve added value to the entire ecosystem.

Entrepreneurial ecosystems

This idea of ecosystems is central to the way businesses operate today, and effective policies need to reflect this. Today, new firms tend to cluster around a single technology platform: while operating independently, they nevertheless complement one another when creating shared offerings to end users.

An entrepreneurial ecosystem, as distinct from an innovation ecosystem, is essentially a collection of stakeholders. These stakeholders may be venture capitalists; educators and R&D agencies; service providers and support agencies, and entrepreneurs themselves. There is no clear hierarchy in the ecosystem: every stakeholder operates more or less independently, yet co-dependently.

Entrepreneurial ecosystems deliver two main services: first, they facilitate and support the kinds of innovative and growth-oriented new firms described above, and second, they help to identify which ventures work and which don’t through trial-and-error allocation of resources. The ultimate outcome of this process is enhanced productivity of the entire ecosystem.

A successful entrepreneurial ecosystem, then, needs to be able to realise the full potential of new ventures, support
entrepreneurial experimentation, and to be able to re-allocate human capital and resources from struggling ventures to those finding success.

This presents a challenge for policymakers. Entrepreneurial ecosystems create their ‘ecosystem service’ through myriad one-to-one interactions among ecosystem stakeholders. It can be difficult for an external policy-maker to identify where the system bottlenecks are and where policy effort therefore should be allocated.

The traditional top-down policy approach to address static market or structural failures is unlikely to work in ecosystems. This is because ecosystem failures are dynamic, not static. From the outside it can be difficult for policymakers to understand how a given ecosystem works, or how to formulate policies that will impact it. Just as entrepreneurship has changed, approaches to policy must change too.
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Effective policymaking for entrepreneurial ecosystems

The illustration above presents a way for policymakers to analyse entrepreneurial ecosystems. The inner layer represents characteristics relating to the individual and his or her venture, while the outer layer shows ecosystem-level attributes that regulate the economic impact of the individual-level entrepreneurial dynamic.

Individual-level characteristics are categorised into Attitudes, Ability and Aspirations, loosely correlating to the following three styles of policy intervention and stage of venture they’re suited to:

- Bridging (standup) – policies encouraging high-potential individuals to become entrepreneurs
- Buffering (startup) – policies seeking to maximise the quality of new ventures and shelter them early on in their lives
- Boosting (scaleup) – policies to maximise the degree to which new ventures can realise their growth potential

For example, in the startup system, opportunity-driven startups are likely to be encouraged by a light regulatory burden. Meanwhile, scaleups with an eye on the export market must have access to competent and experienced managers.

The three sections cover the early life-cycle of a new venture, from formation, to startup and to scaleup. They also define the productive potential of the ecosystem as a whole: for instance, if the standup system fails to encourage high-potential individuals to pursue entrepreneurship, the startups it produces may not be of sufficiently high quality to even reach the scaleup stage.

Policymakers must consider the balance of these three systems for the ecosystem as a whole to benefit. Ten lessons for policy are suggested:

1. Look beyond individual startups and scaleups to the functioning of the ecosystem, addressing any bottlenecks that might be hampering the system as a whole.
2. The more one moves toward scaleup activities, the less effective firm-specific, ‘supply-push’ policy interventions are likely to be.
3. Firm-specific, customised interventions should be designed to drive high-growth firms.
4. Policies to address market and structural failure still have a role to play in regions with limited entrepreneurship support infrastructure.
5. Stakeholders must be actively engaged – a top-down approach is unlikely to work in a non-hierarchical
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ecosystem.
6. Ecosystem initiatives should facilitate the identification by participants with the broader ecosystem, and strengthen commitment among stakeholders to coordinate their actions.
7. A long-term approach is necessary to facilitate an ecosystem. Successful interventions should be coordinated by a credible, committed backbone organisation.
8. An ecosystem approach to entrepreneurship policy should be closely coordinated with projects under the EU smart specialisation policy framework.
9. Operating in partnership with and through regional backbone organisations will help overcome the challenges inherent in an ecosystems approach to policy.
10. A successful, EU-wide entrepreneurship policy needs to a) combine region-specific and national approaches, b) recognise that ecosystem structures and processes will be different at different levels of deployment, c) foster learning and experience exchange across regions, and d) assume an ecosystem-wide approach to understanding how those ecosystems work.

Four key features for a successful EU-wide policy:

a. Combine region-specific approaches
b. Recognise structures and processes will differ at different levels of deployment
c. Share learning across regions
d. Assume ecosystem-wide approach to understanding how they work