



From Startup to Scaleup

Uri Gabai
CEO, Startup Nation Policy Institute

Eugene Kandel
Chairman, Startup Nation Policy Institute

In this article with leading economists of the Startup Nation, we discuss the challenge of scaling from startups to scaleups. One thing is clear – whether it is increasing population-level benefits, helping to make government as adaptive as the startups themselves, or helping to ensure growth in the access to middle management, more centralization – perhaps even a National Innovation Council – seems likely to help with setting the agenda for continued growth.

Coller Venture Review —

Thank you gentleman for your time today. As trained economists, public policy leaders, and leaders of Startup Nation Policy Institute, you are clearly thinking across a broad range of topics and opportunities when it comes to innovation. Can we begin by your helping us to understand your mission please?

Eugene Kandel —

Our mission is about helping the Israeli government to be more proactive in the competition for ecosystems around the world – that is, government-to-government competition, rather than firm-to-firm competition. And we know that competition requires the government to be strategic, thinking long-term and having a coherent, coordinated policy. In general, governments in democratic regimes are pretty bad at strategy. Thus our goal is to help the government think in the context of a decade rather than tomorrow morning. In doing so the government must first ensure that the Israeli tech ecosystem is in a leadership position worldwide ten years from now. Moreover, it must take steps to maximize the tangible benefits that the Israeli tech ecosystem provides to the average Israeli citizen in terms employment, investment, use of technology, and philanthropy. These benefits must become much more pronounced than they are today. Most of the work that we do is focused designing coordinated government policies that advance these two goals.

CVR —

In reading about the potential transition from “Start-Up Nation” to “Scale-Up Nation,” where the tech ecosystem is presumably more fully integrated into everyday life,

I’ve understood that some consider the challenge to be about a lack of middle management. Can you comment on this point of view?

Kandel —

I think that there is a perceived shortage of middle management for the simple reason that Israel has very few large corporates, and therefore relatively fewer trained corporate managers. However, I believe that there is no lack of ability among Israeli companies to scale. In the past, some people believed that Israel is only capable of building and selling startups, rather than growing companies. I am happy that this narrative has changed, and today selling a startup for \$100 million is no longer considered to be a grand achievement. A different narrative, however, emerged, that in order to grow, you have to be near your clients or near your investors, which that in many cases causes Israeli companies to move most of their business activities abroad for growth stage. So it’s really less having to do with middle management, and much more having to do with assumptions about how to achieve long-term sustainable growth. I would also add that there is in fact plenty of middle management available in Europe and the U.S., which one can hire and relocate – and many do. I do believe we have some shortage of experienced product managers. But then again, this is being solved, either by people rising to the challenge and moving across companies as they grow, and/or bringing in outside expertise. So bottom line, I don’t think that the management issue, especially middle management issue is one of our top challenges.

CVR —

Thank you for a helpful lead-in! So, in fact, what would you gentlemen say are the top challenges ahead, when we think about extending the benefits and opportunities of an innovation-driven economy?

Uri Gabai —

First – expanding on what Eugene said – I think you have to look at this as an evolutionary process. You start from the very early stages of the state of Israel. You know, it was an economy that was decidedly not high tech, but it had lots of ideas – drip irrigation is a good example. The next stage was taking these (early) ideas and turning them into startups. That happened in the late 1980s and 1990s. And then you get the next stage – the ability to develop the product, not just have the technology.

And now, finally, the fourth stage – not just commercializing the product – but building a company with multiple products. And every time you advance to the next stage, you lack either financial components or human capital components. And you have to fill them in, as Eugene said, by either buying them or importing them. In my view, that’s one of the advantages of a small economy. We have to remember, you will always have some elements missing in the growth of a very innovative ecosystem.

CVR —

Can you help our readers understand how these broad objectives are translated into action? How would you say you break the vision down into discrete priorities?

Gabai —

I think the first priority or the first objective must be making this journey. Going further, and I think

Eugene talks a lot about this, is the importance of fighting complacency. It is our worst enemy. Japan was masterful in technology in the 1970s and 1980s, and we know they lost their ascendancy. And if it can happen in Japan – a technological giant and an economic giant – it can happen to Israel. If we go to sleep for five years, does it mean we miss the next stage? How do we think about pushing forward, towards the next innovation wave?

What am I looking at practically? Well, to start, I am looking at artificial intelligence [AI].

I think AI took a leap in 2013. It started in the 50s and 60s, probably before from a computer science point of view. But AI and big data really became an economic engine relatively recently. And when I think about this, I am mindful of that fact that China is also working on AI, and that their big data capabilities rely on a population of 1.3 billion people, multiple times Israel’s population. So while I look at Israeli companies that are amongst the AI giants, and I think about a position of excellence, I say “Ok, we have to compete harder.” And this takes planning, a point we keep returning to. Israel’s innovation-related success today, it should be pointed out, started in 1973 and were redoubled in 1985 – the policies started years ahead of other nations, we had a head start. And this is a critical part of our nation strategy, and our national imperative.

To be clear, everybody understands that there is a global innovation race. No one is winning based on cheap labor anymore. So the competition is a lot fiercer, there are fewer arbitrage opportunities. It’s also worth noting that it’s no longer about national comparative advantage but about

absolute advantage. Can we lose in this race? Yes, we can. But we don’t have to. We just have to continue punching above our weight.

CVR —

What do you imagine is needed in order to do that, to continue as you said to “punch above your weight”?

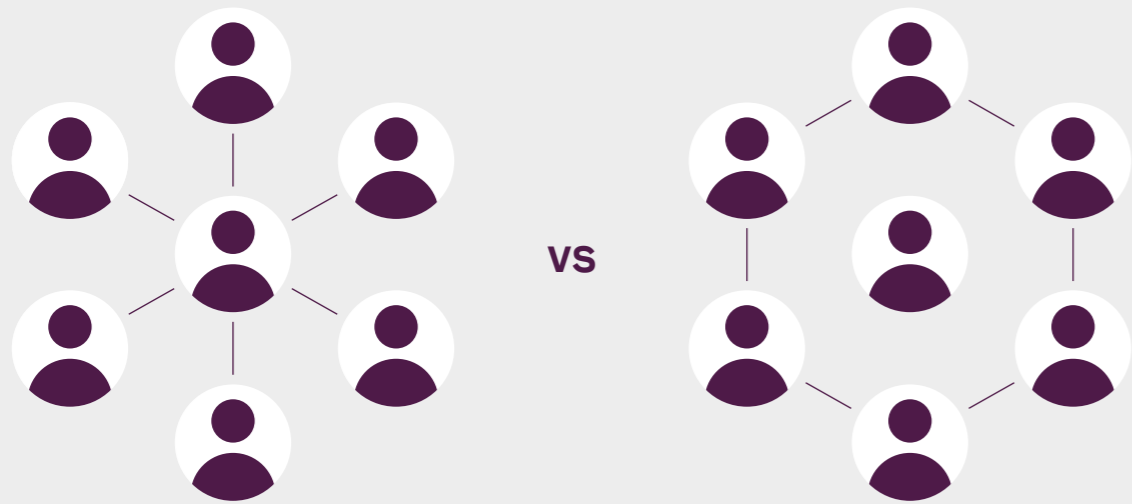
Kandel —

Many of our companies compete quite well. But the government as a system does not compete well at all. For example, academia is set up structurally in such a way that it cannot compete for the top talent. The only way for Israel to win is by attracting the very top people in the world, or at least the top Israelis and Jews. Just to give you an example, Johns Hopkins University has a research budget of \$3.5 billion/year. By contrast, the entire Israeli ecosystem research budget is \$1 billion. In Israel, you have nine universities and 20 colleges, this budget has to be spread. How do you compete with somebody who can spend multiple times more than you can? Ultimately, you have to aggregate your resources, you have to focus on a small number of areas where you have a comparative advantage and which are critical for you. If you don’t do that, and allow the system to spread thinly, you risk achieving very little. 🚫



And so that’s our goal – to help the government think in the in the context of a decade rather than tomorrow morning





CVR —

So, to paraphrase – it’s really about bringing discipline and focus in order to play some smart bets?

Kandel —

Yes, exactly, and it’s in every area, whether it’s in training people, retaining the best companies, retaining the best people in academia and industry. There must be a coordinated effort that says, “We can’t afford to lose this ecosystem. And if we don’t compete head to head, we’re going to lose.” I am reminded here of competition between firms. Just as you know, the firm loses market share if it stops competing. Let us remember, Nokia in 2009 was the largest producers of cell phones in the world. And in 2013 it quit that business, since it was thrown out of the market after just three years, as it didn’t look sufficiently strategically into the future. Israel cannot afford such experience. Back to the retention of talent, I will just point out that Israelis

now make up 25% of the science-related faculties of the top 40 universities in the U.S. We need the top academic talent to come back, and we need it to stay. It’s really about the balancing act of a rapidly growing and innovative ecosystem that Uri referred to earlier.

CVR —

How do you imagine a coordinated policy would address this challenge, and others like it?

Kandel —

The important part is not to find the very best answer, but not to end up with the wrong answer. To start, the biggest challenge is clearly that there is no cross-governmental forum with a mandate to get together and develop a common language, an agreed identification of challenges and opportunities, and then figure out a coordinated set of policies. This would also include identifying the tools that need to be developed and the amounts that need to be invested, as well as the type of

regulations and laws that would need to be changed. Unless coming from the very top, I would say that such a forum is almost structurally impossible. So basically, we never optimize globally for the entire system – each office, each company optimizes within the constraints.

Gabai —

I totally agree. Now in the Office of the Chief Scientist, you have probably one of the most successful government organizations specifically in fostering innovation and R&D in history. But at some point, the challenge is to address the bigger puzzle. It’s not just about R&D, it’s a much broader challenge. So I see things slightly different than Eugene. I don’t think it’s just coordination. I think there should be an entity in government – a National Innovation Council let’s call it – that is in charge of innovation policies, that synchronizes from blockchain regulation to financial services to security (as an example).

CVR —

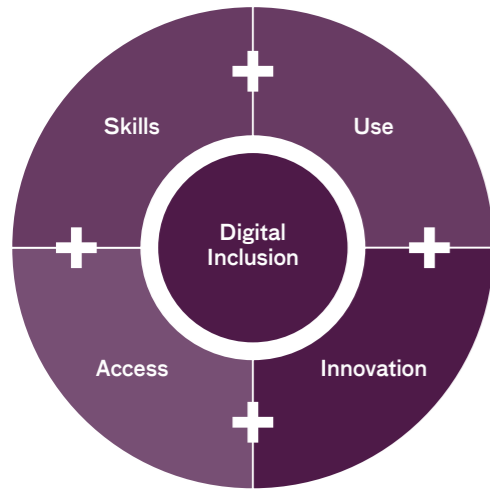
How do you imagine this would affect the broader public?

Gabai —

Yes, that is the next challenge, getting more people and more diverse populations into innovation. You have to make the incentives right for the companies. And it’s something that is not easy. But again it takes planning, and someone has to look at these challenges 10 years from now, and not as something for the next three months. You almost need a map of the world 10 years out, in order to figure out where to play, you really have to have a firm vision of where the world is going to go. And you really have to manage towards that future vision in order to draw out for people.

Someone in government has to look and say, “Well, these are the emerging technologies. Can I be a contender?” “Do I have the human capital to do this?” “What type of regulation will be required?” ➔

“ I do believe we have some shortage of experienced product managers. But then again, this is being solved, either by people rising to the challenge and moving across companies as they grow, and/or bringing in outside expertise ”



CVR —

How does the bubble in valuations potentially affect the move to more scaleups?

Kandel —

Yes, there was a bubble in valuation. But I'm less worried about the big guys, I'm more worried about the small firms who are having tough time raising capital. Israel is generating fewer and fewer start-ups for the last 6 years now. So, if there is a certain convergence rate of start-ups that culminate in a unicorn, then fewer start-ups imply fewer unicorns in the future. These challenges are not getting enough attention from a policy perspective, specifically as it relates to regulation. For example, a start-up that is somehow involved with Bitcoin or another currency, finds it almost impossible to open a bank account, which drives them to Cyprus or elsewhere, which doesn't make sense to us at all. This is an unfortunate expression of lack of coordination and cooperation in overall policy.

“

For example, a lot of startups cannot grow here if they have anything to do with Bitcoin or any other virtual currency, they can't open a bank account. So that basically drives them to Cyprus or somewhere else, which doesn't make sense to us at all. But that, unfortunately, is one of these expressions of lack of coordination, cooperation, and guidance

”

CVR —

Where would you start, what first step would you take towards this more coordinated effort to support the growth of startups into scaleups?

Kandel —

The policy is not usually one big thing, as there is never a silver bullet. Instead, there's a series of things that together generate an environment in which something happens. It's very rare to create one large legislation or one large policy or regulatory change that would suddenly change everything. Thus we argue for the creation of some forum with a mandate and long-term view.

CVR —

Innovation policy is a serious business. Clearly it has to be driven by data. What are some of the challenges?

Gabai —

Once you take money from the government, then all of a sudden, one has to think twice about any advice being – same thing goes for Google or Facebook. But the goal is basically to build better foundations and give solid policy advice. Contextually, I think that the culture of science and knowledge and innovation was here from the get go. So, in that sense, I think that, we're part of a journey. And now there are new challenges ahead of us. You can't win with economies of scale. A small country like Israel can only win based on ideas. And what's high tech? High tech is basically taking these ideas and turning them into a product. That's the only way that we can win. And in that sense, you know, I'd like to think we are still in the very beginning part of the journey, on a continuum of growth we will manage.

Kandel —

I'm not there to win, I'm there to create ideas and solutions to problems that, in my opinion, are being neglected. For me, I might have done things that had a higher probability of success, but I didn't. I did things because I thought they were important. You always have to look at the bigger picture, the bigger story. ■



About

Uri Gabai is CEO of the Start-Up Nation Policy Institute. He was previously Chief Strategy Officer for the Israel Innovation Authority, where he headed the strategy and economics divisions. Gabai also previously headed the economic unit at Israel's Office of the Chief Scientist.

Eugene Kandel is Co-Chairman of the Start-Up Nation Policy Institute and former CEO of Start-up Nation Central. He is also an Emil Spyer Professor of Economics and Finance at the Hebrew University of Jerusalem, with a joint appointment at the Department of Economics and the Business School. His areas of expertise are Financial Markets and Institutions, as well as Corporate Governance. His work has been published in leading Economics, Finance and Accounting journals.