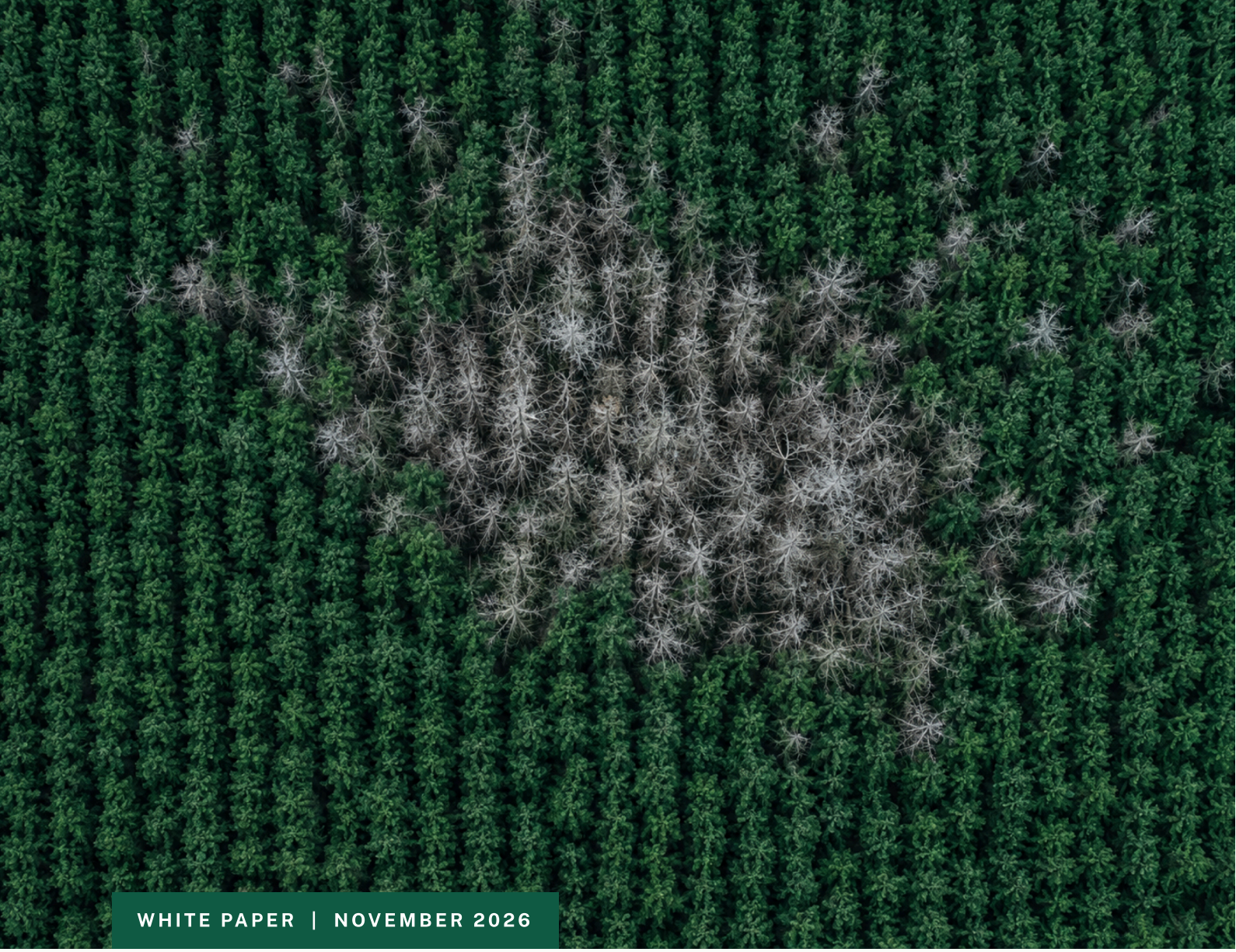

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How Ecosystems Die

Nine reasonable decisions that end a startup economy

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How it happens, how to reverse it, and what recovery looks like

FOREWORD

What a dead ecosystem looks like

A dead ecosystem is not an empty one. That is the first thing to understand about it, and the reason so few people notice when it happens.

Walk into the innovation hub on a Tuesday evening and it is full. There is a pitch night on, and the coffee is good. The founders on stage are articulate and well prepared. Several of them stood on the same stage two years ago, with the same companies and better slides.

Listen to what people talk about afterwards. The conversation is about the next funding call and who is on the assessment panel. Nobody mentions a customer. Nobody is hiring more than one or two people, and nobody expects to.

Look at who is in the room. The investors all manage public money. The founder everyone admired, the one whose product people paid for, is missing. She moved her company abroad last spring. The best engineer you know has taken a job with a multinational, because that is where the interesting work is now.

Ask how things are going and you will be told, sincerely, that they have never been better. There are more programmes than ever. The numbers are up. A minister visited last month.

Nobody in the room is angry, and nobody is lying. Everyone is busy. That is what makes it so hard to see: the activity is real, and it leads nowhere. Companies are started and sustained, and none of them becomes the kind of employer that changes a town.

No single country is described here. But most people who work in this field have stood in a room like it. This paper is about how a place comes to be that room, and how it finds its way back.

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Summary

No government sets out to kill its startup economy. The ones that manage it do so through a series of decisions that are each sensible, popular and defensible in front of a parliamentary committee. This paper follows nine of them.

The nine decisions are these. Success is measured by activity. High-growth companies are supported through the same door as every other small business. Grants become a company's first revenue. Programmes multiply. State money comes to dominate early investment. Tax relief is concentrated at exit while the early years become more expensive. Rules are written with established companies in mind. Companies that survive without growing are kept alive while the best founders leave. And the strategy is then renewed, because every number it reports is rising.

That last point is the heart of the argument. An ecosystem in decline does not look like one. The measures governments use to track startup policy count activity, and activity increases all the way down. The first third of this paper describes the decline. The remaining two thirds are about what to do, because the central finding is an encouraging one: an ecosystem that dies by decisions can be revived by decisions.

Part II sets out nine reversals in the order they should be made. Part III describes what a living ecosystem looks like, offers nine questions any minister or agency head can answer in ten minutes, and draws on three places that show the reversals working at very different scales: Estonia, Singapore and Boulder, Colorado.

The country described in Part I does not exist. It is a composite. No single economy has made all nine decisions, and most have made several. Readers are invited to count their own.

PART I

I

How it died

The worst case first. A capable, well-governed country makes nine sensible decisions and ends with a startup economy that produces startups and no companies.

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The best annual report in the country's history

In the fifteenth year of its national startup strategy, the agency responsible published the best annual report in its history. The number of startups supported had risen for the eleventh year in a row. More founders had been trained than ever before. There were more accelerators, more hubs and more regional programmes than at any point since the strategy began, and every county now had at least one. Investment committed through state-backed funds had reached a record. The minister launched the report in a converted warehouse full of founders, and the photographs were excellent.

One number was not in the report, because nobody had been asked to collect it. It was the number of companies founded under the strategy that had gone on to employ a thousand people, or five hundred, or to reach the kind of revenue that changes a regional economy. Had anyone collected it, the answer in year fifteen would have been the same as in year one. It was zero.

The country in this story is small, open, well educated and well governed. Its officials are capable and honest. Its ministers wanted what every minister wants: more good companies, more good jobs, and a reason for talented people to stay. Nothing that follows depends on anyone being foolish or acting in bad faith. That is what makes it worth studying.

It helps to be precise about what "dead" means, because the word is doing a lot of work in the title. In this paper an ecosystem is dead when three things are true at once. First, fewer companies cross $1m in annual revenue from each year's cohort than did five years earlier.

Second, the most capable founders incorporate or raise their money abroad by default, without treating it as a decision. Third, the state has become the largest single source of early-stage capital. Any one of these can be a passing phase. All three together describe an economy that still produces startups and no longer produces companies.

The country reached that point through nine decisions. Each is described the same way: what was decided, why it was reasonable, what it broke, and the early signal that could have been noticed at the time.

Nine reasonable decisions

01

Count activity

The first decision was about measurement, and it was made almost without discussion. The strategy needed targets, and the targets chosen were the number of startups created, the number of founders trained and the number of jobs supported.

It was a reasonable choice. A minister has to report progress every year, and these figures can be counted inside a budget cycle. The outcomes that actually matter, companies reaching scale, take seven to ten years to appear, which is longer than most ministers hold a portfolio.

What it broke was the direction of everyone's effort. Agencies do what they are measured on, and an agency measured on activity will produce activity. Supporting two hundred companies that go nowhere scores better than supporting twenty that grow. Scale did not disappear from the country's ambitions. It disappeared from the dashboard, and after that it was nobody's job.

MISSED AT THE TIME

The early signal was in the language. From the first annual report onward, companies were "supported", "engaged" and "assisted". Revenue was never mentioned.

02

Merge the two kinds of entrepreneur

The second decision was to serve every new business through one front door: one agency, one pool of advisors and one application form.

This looked both efficient and fair. A single service is cheaper to run, it treats every applicant alike, and it spares the government from the charge of picking winners.

The difficulty is that there are two quite different kinds of new business. Researchers at MIT drew the distinction in 2013: traditional small and medium-sized enterprises serve local markets with established business models, while innovation-driven enterprises pursue global markets on the strength of something new. The two play different economic roles and need differently designed support, and policy has a habit of treating them as one group.[1] Innovation-driven companies are a small minority of new firms, but the evidence on where jobs come from is consistent. In the OECD's analysis, a small share of fast-growing firms accounts for more than half of the new jobs created by growing small and medium-sized businesses.[2]

When both kinds go through one door, the advice is calibrated for the majority. A founder trying to build a global software company is told to manage cash conservatively, to be profitable in year two and to hire slowly.

This is sound advice for a business that intends to stay small. For a company that needs to grow quickly or not at all, it is close to fatal, and it is delivered with complete sincerity.

MISSED AT THE TIME

The early signal was an advisor's diary: a cafe in the morning and a machine-learning company in the afternoon.

03 Make the state the first customer

The third decision was to make grants the main source of early money.

There was a real gap to fill. Private investors were scarce at the earliest stage, and a grant lets a young company take risks it otherwise could not. Other countries were doing the same, and no minister wants to be told that founders are better funded next door.

Over time, however, founders learned what the system rewarded. A company's first skill became the application. Its plans were written for assessors, in the vocabulary assessors use, around the milestones a grant scheme could verify. The skills that customers reward, selling, pricing and listening to someone refuse to pay, were deferred, sometimes for years. Companies emerged from three rounds of support with a product, a team and no evidence that anyone would buy what they made.

MISSED AT THE TIME

The early signal was a hiring pattern. Companies engaged a grant writer before they hired a salesperson.

04 Multiply the programmes

The fourth decision was really a hundred small ones. Every government department, every region and every university launched its own accelerator, incubator or hub.

Each of them could be justified. Regions deserved the same access as the capital. Universities wanted routes to market for their research. Each launch was a visible, local, positive announcement, and nobody has ever lost an election by opening an innovation centre.

The cost was hidden because it was paid in a currency nobody counted, which is the time of people who have actually built companies. A small country has a small number of them. Spread across forty programmes, each founder got an hour a month from someone who had been through it, and the rest of the support came from people who had not. Three different functions, coaching a founder, mentoring one and giving expert advice on a specific problem, were merged into a single word, "mentorship", and staffed accordingly. Founders, meanwhile, moved from programme to programme, and time spent in programmes was time not spent with customers.

MISSED AT THE TIME

The early signal was visible at any demo day. The same twelve mentors sat on every panel.

05 Distort the capital

The fifth decision was to let state funds become the dominant early investor, and to attach conditions: a share for each region, a share for priority sectors.

Again there was a genuine gap, and public money is expected to serve public aims. It would have been difficult to explain to parliament why state investment should ignore the regions.

The research on this is more careful than either side of the argument usually admits, and it is worth stating exactly. A study of more than twenty thousand venture-backed companies across twenty-five countries found that companies backed by a mix of private and government-sponsored investors did better than those backed by private investors alone, provided the government share was moderate. Where a large fraction of the money came from government-sponsored funds, companies did worse.[3] State capital is not the problem. Dominant state capital is. Josh Lerner's survey of public venture programmes reaches a similar conclusion and observes that failed efforts greatly outnumber successful ones, often because governments tried to direct a market they could only help to form.[4]

In the country, the state share was not moderate. Valuations stopped carrying information, because the largest investor was not pricing risk. Private investors learned to wait for the state to move first, and then learned not to bother.

MISSED AT THE TIME

The early signal was that private angels stopped leading rounds.

06 Reward the exit, tax the start

The sixth decision was about tax. Relief was concentrated on capital gains at the point of sale, while the costs of the first five years, employing people, granting share options and meeting compliance obligations, were left to rise.

Exit relief is easy to announce and popular with the most visible people in any startup community, the founders and investors who have already succeeded. It photographs well in a budget speech.

The flaw is one of timing. A founder who is thinking about capital gains tax has already built a company worth selling. That company is past the point of failure. The companies that needed help were the ones that ran out of money in year two because the first ten hires cost more than they would have across the border. Relief at the finish line does nothing for those who never reach it, and they are the large majority.

MISSED AT THE TIME

The early signal was in the budget speeches. Capital gains were mentioned every year. The cost of year one was not mentioned at all.

07 Regulate for incumbents

The seventh decision was not aimed at startups at all, which is why it was never debated as startup policy. Procurement and compliance rules were written with large, established companies in mind.

The intentions were good. Rules protect taxpayers and consumers. Asking a supplier for a track record reduces the risk of a failed contract, and no official has been criticised for choosing an established provider.

The effect was that the country's young companies could not sell to their own government, which in a small economy is often the largest buyer in the market.

A tender requiring three years of audited accounts excludes, by definition, every company under three years old. At the same time, compliance obligations with a fixed cost fell hardest on the smallest firms. A requirement that takes a multinational's legal team an afternoon can take a five-person company a month.

MISSED AT THE TIME

The early signal was a single line in the tender documents: three years of audited accounts.

08 Tolerate the zombies, ignore the exits

The eighth decision was a pair of omissions. Companies that survived without growing continued to receive support, and founders who left the country were treated as individuals making personal choices.

Both were understandable. Keeping a company alive protects jobs, and withdrawing support creates a visible casualty. And no single departure looks like a failure of policy. Founders have always moved.

The damage came from accumulation. The OECD has documented how firms that survive without being viable hold on to capital and skilled people, congest their markets and hold back the growth of more productive companies, with young firms affected most. [5] That research concerns older, indebted companies, but the mechanism is the same when the life support is a grant. Good engineers stayed in companies that were going nowhere.

Meanwhile the founders with the greatest ambition incorporated elsewhere, and they took with them the thing a young ecosystem needs most, which is the example of someone local who made it.

MISSED AT THE TIME

The early signal was a statistic the agency was proud of. Survival rates rose every year. The number of companies reaching scale fell.

09

Double down

The ninth decision took an afternoon. The strategy was renewed for another five years, substantially unchanged.

On the evidence presented, it was the only reasonable course. Every reported number was up. An independent review had confirmed that targets were being met. Changing direction would have meant admitting to an error that nobody could see.

This decision closed the loop. Each of the previous eight was now protected by the record of its own apparent success, and the next five years deepened all of them.

MISSED AT THE TIME

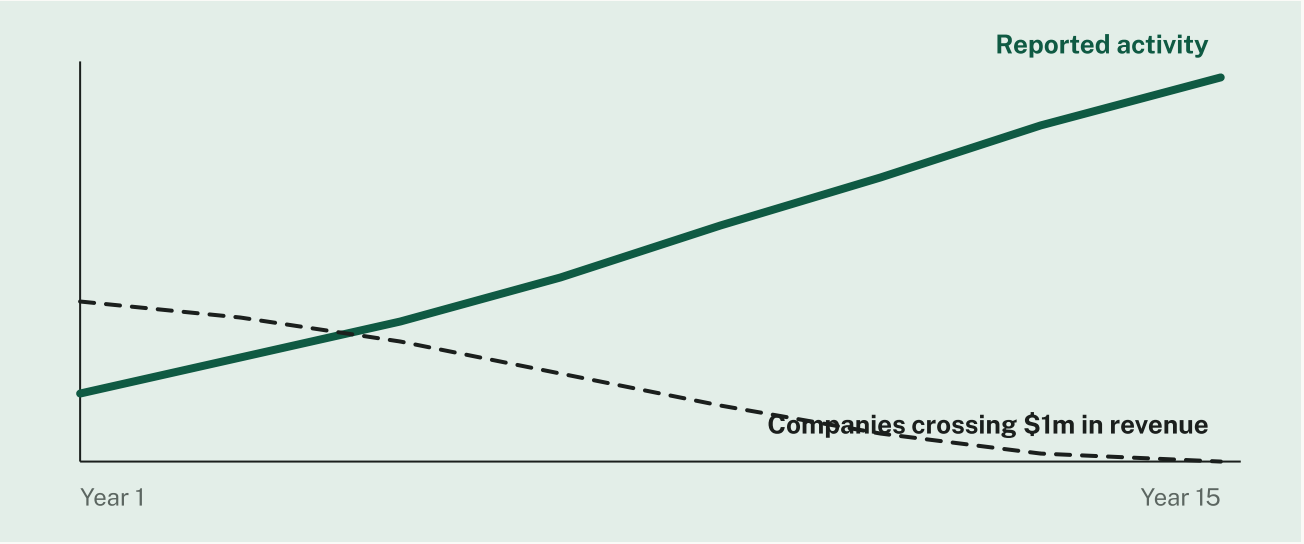
The early signal was the new strategy document itself. It had the same targets, with larger numbers.

Why nobody noticed

It is tempting to ask how capable people could preside over fifteen years of decline without seeing it. The answer is that they were looking exactly where they had been told to look, and everything there was improving.

Consider what the system measured: companies created, founders trained, programmes running, funds committed. Every one of these is an input. Each can rise indefinitely without a single company reaching scale, and several of them rise faster when companies fail to scale, because a company that stalls remains eligible for support. The dashboard was not wrong. It was answering a different question from the one the country cared about.

THE GREEN DASHBOARD



Illustrative. The country is a composite and the lines show the pattern, not measured data.

Consider also who was in a position to raise the alarm. The founders closest to the problem fell into two groups. Some had adapted.

They had built businesses that were good at winning support, and they had no reason to criticise the system that sustained them. The others had left, and people who have left do not attend consultations. The ecosystem's most informed critics were, by construction, either invested in it or absent from it.

The officials, for their part, were being told the truth. Targets had been met. They had done what was asked, competently, and the result was the opposite of what was intended. There is no scandal in this story and nobody to dismiss. That is uncomfortable, because a failure with no culprit is harder to fix than one with a villain.

It is also the most hopeful fact in this paper. Nothing in the country's decline was caused by forces outside its control. It was not too small, too remote or too late. It made nine decisions. Every one of them can be made differently, by the same institutions and largely by the same people.

PART II

II

Resuscitation

The first twenty-four months. A short list of things government stops doing, in the order to stop them.

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The turn

Resuscitation is the first twelve to twenty-four months. It is mostly subtraction: a short list of things that government stops doing. This matters for two reasons. Stopping is cheaper than starting, so none of what follows requires new money. And stopping is faster. A new programme takes two years to design and launch. A reporting requirement can be changed in a quarter.

Two points of reassurance belong here. The first is that nothing in this section is hostile to the existing system of small-business support. Most new businesses are not trying to become global companies and should not be pushed to. The services built for them generally serve them well, and they should continue. The argument is only that a different kind of company needs a different kind of help.

The second is that nothing here requires the state to withdraw. The places that have done this best have highly active governments. What distinguishes them is where the state puts its effort: into the conditions under which companies form and grow, and away from deciding which companies those should be.

Nine reversals, in the order to make them

The reversals are presented in the order they should be made, which is not the order in which the decisions were taken.

ORDER	UNDOES	STOP	START
1	No. 1	Reporting activity as success	**Publishing how many companies cross $1m in revenue, by cohort, every year**
2	No. 2	Routing every founder through one door	**A separate track for innovation-driven companies**
3	No. 6	Concentrating relief at exit	**Relief in years one to five**
4	No. 3	Funding companies that have no customers	**Support tied to revenue or matched private investment**
5	No. 5	Leading rounds with mandated state money	**Co-investing behind private leads**
6	No. 4	Launching new programmes	**Fewer programmes, judged on their graduates**
7	No. 7	Asking young companies for a track record	**Procurement open to companies under three years old**
8	No. 8	Renewing support without growth	**Time limits, and an easy way to close and start again**
9	No. 9	Renewing strategy on activity figures	**An entrepreneur-led review with the power to end programmes**

Measurement comes first because the other eight cannot be seen without it. The proposal is modest: publish, every year, the number of companies from each founding cohort that have crossed $1m in annual revenue. That threshold is not scale, and it is no longer enough on its own to raise a first institutional round.

But it is the first point at which a company has shown that customers will pay, repeatedly, for what it makes, and it is a figure that every revenue authority already holds. A government that publishes it will find that every agency in the system begins, within a year, to care about it.

Separation comes second because it determines who receives everything that follows. A separate track for innovation-driven companies needs three things: an honest entry test based on ambition and market, advisors who have themselves scaled a company, and a clear statement that the existing small-business service continues unchanged for everyone else. The MIT researchers who drew the distinction were explicit that neither kind of business is superior. They need different things. [1]

Start-up costs come third. The aim is to make the first five years as cheap as the state can afford: the cost of employing the first ten people, the tax treatment of share options, and the fixed cost of compliance. This is ranked ahead of the capital reforms because it helps every young company, including those that will never raise outside money.

Customers come fourth. Support should follow evidence that somebody will pay. That can mean matching revenue, matching private investment, or simply asking for a named customer before the second round of support. The purpose is to make selling the first skill a founder learns.

Capital comes fifth. The evidence described in Part I points to a specific design: public money invested alongside private investors, in a minority position, on the terms the private investor has negotiated. [3] Lerner's recommendation is the same in spirit.

Where the private market decides which companies are funded, the scope for political distortion is smallest. [4] Regional and sector mandates should be removed from investment funds and, where they matter, pursued through other instruments.

Consolidation comes sixth. No new programmes should be launched until the existing ones have been assessed on what their graduates went on to do. Coaching, mentoring and expert advice should be staffed and described as three different services. Experienced founders should be concentrated where they are most useful.

Procurement comes seventh. Track-record requirements should be replaced with proportionate tests for contracts below a set value, and compliance obligations should scale with company size. The state is frequently the best first customer a young company could have, in the sense that matters: it pays for a product.

Recycling comes eighth. Support should carry a time limit, and renewal should require growth. The other half of this reversal matters as much. Closing a company should be quick, cheap and free of stigma, so that the founder and the team can start the next one. The OECD's work on insolvency points the same way: orderly exit frees people and capital for more productive use. [5]

Governance comes ninth, and Part III returns to it. Every programme should carry a sunset clause, and the review that decides on renewal should be led by people who have built companies.

What improvement looks like

Anyone who begins this work should be warned about the first six months, because the first result is that the numbers get worse.

When a country that has counted activity for fifteen years publishes its first outcome figure, the figure is small. It will be reported as a decline. It is the first accurate reading the system has produced, and whoever publishes it should say so plainly and in advance. It is the point at which most reform efforts are abandoned, and for that reason the measurement reform should be announced together with a commitment to publish the figure for at least five years.

By twelve months, the separate track should be operating, the number of programmes should have fallen, and the first young companies should have won public contracts under the new rules. None of this will have produced a scaled company yet. What it will have produced is a change in what founders talk about. In a healthy ecosystem founders talk about customers.

By twenty-four months, private investors should be leading a larger share of early rounds, and the first cohort measured on revenue from its founding will be reporting. This is the earliest point at which anyone should expect evidence, and it is still early. The honest timescale for the whole undertaking is ten years, which is the subject of Part III.

PART III

III

Recovery

Years three to ten. What a living ecosystem looks like, three places that show it, and what keeps it alive.

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Vital signs

Recovery is years three to ten. Where resuscitation was subtraction, recovery is addition: it describes what grows once the harm has stopped. It begins with knowing what health looks like.

The nine questions below correspond to the nine decisions. Each can be answered yes or no, and a minister, an agency head or a founder can complete the set in ten minutes. A score of seven to nine describes a living ecosystem. Four to six describes one at risk. Three or fewer describes one in decline, whatever its annual report says.

The questions are deliberately blunt. They are designed so that two people in the same country, one inside government and one outside it, will give the same answers. Where they disagree, the disagreement is itself worth an hour of anyone's time.

SCORECARD

Vital signs

Nine questions, one for each decision. Tick yes or no, then count the yeses. It takes ten minutes.

NO.	QUESTION	YES	NO
1	Do we publish how many companies crossed $1m in revenue this year?	☐	☐
2	Do innovation-driven founders have their own track, with advisors who have scaled a company?	☐	☐
3	By year three, do supported companies earn more from customers than from grants?	☐	☐
4	Could a founder name the one programme that fits their stage?	☐	☐
5	Do private investors lead most early rounds?	☐	☐
6	Is hiring the first ten employees cheaper here than in peer economies?	☐	☐
7	Can a two-year-old company win a government contract?	☐	☐
8	Do founders of closed companies start again within two years?	☐	☐
9	Has any programme been closed on evidence in the past three years?	☐	☐

7 to 9	4 to 6	0 to 3
Alive	**At risk**	**In decline**

Three places that got it right

A caveat first. None of the three places below came back from the dead, and it would be misleading to present them as recoveries. They are offered for a different purpose. Each shows one or more of the nine reversals working in practice, and between them they cover three very different scales: a nation of 1.3 million people, a city-state and a single small city. Whatever the size of the reader's economy, at least one of them is near it.

A NATION

Estonia

Make the start cheap

Estonia's contribution to this argument is a design choice about timing. An Estonian company pays no corporate income tax on the profits it keeps and reinvests. Tax falls due when profits are distributed. [6] For a young company, which by its nature reinvests everything, the effect is that the tax system stays out of the way during exactly the years when cash is shortest. Tax is declared and paid online. [7]

This is the reverse of Decision 6. The relief is not a reward for reaching the exit. It is built into the first day. Estonia's digital administration does similar work against Decision 7, since a compliance obligation that takes minutes costs a five-person company roughly what it costs a large one.

A CITY-STATE

Singapore

Follow the private investor

Singapore is the most useful case for any reader who suspects this paper of being an argument against government. Singapore's state is among the most active in the world in its startup economy, and its approach to early-stage capital shows what disciplined activity looks like.

Under the Startup SG Equity scheme, which has run since 2017, public money goes into a startup only alongside independent, qualified private investors, according to set co-investment ratios.[8] The state does not choose the company. A private investor chooses it, prices it and puts their own money in, and the state follows. By the government's own account in 2026, the scheme had invested more than S$560m of public money and drawn in more than S$2.6bn of private investment, upwards of four private dollars for each public one.[9]

This is the reverse of Decisions 3 and 5. It also resolves an apparent tension in this paper's argument. An ecosystem should be designed and not directed, and Singapore shows the difference. The state there writes the rules of the scheme with great care and then defers, deal by deal, to the judgement of people who are risking their own capital. That matches the pattern in the international evidence, where a moderate public share alongside private investors is associated with better outcomes and a dominant one with worse.[3]

A CITY

Boulder

Let founders lead, and give it twenty years

Boulder, Colorado, is a city of around a hundred thousand people. It has no sovereign wealth fund and no national strategy, and it became one of the densest startup communities in the United States. Brad Feld, an investor who moved there in 1995, later set out what he believed had made the difference, in four principles he called the Boulder Thesis. Entrepreneurs must lead the community. The leaders must commit for the long term, which he puts at twenty years. The community must be open to anyone who wants to take part. And there must be a continual run of activities that bring the whole community together. [10] [11]

Feld's distinction between leaders and feeders is the part most relevant to government. Entrepreneurs lead. Everyone else, including investors, universities, service providers and the state, plays a supporting role that is essential and is not leadership. [12]

This is the reverse of Decisions 4 and 9. Boulder did not grow through a proliferation of programmes, and its direction was not reset with each electoral cycle.

What keeps it alive

The nine decisions in Part I share a single underlying cause. In each case the people making the decision were a long way from its consequences, and the signal that might have corrected them arrived late or never. Policy operates on a cycle of years. Markets operate on a cycle of weeks.

Whatever is built in recovery has to close that gap permanently, or the nine decisions will be made again by the next generation of equally capable officials.

The mechanism this paper proposes is entrepreneur-led governance, and it is worth being specific about what the phrase means, because it is often used loosely. It does not mean an advisory council that meets twice a year and is thanked for its input. It means a standing body, with a majority of members who have built and scaled companies, that has three defined powers. It sets the outcome measures the system reports. It reviews every programme against those measures on a fixed schedule. And it can recommend closure, with the minister obliged to respond publicly.

Three design points follow from the cases above. Members should serve long terms, because the work takes twenty years and institutional memory is most of the value. Membership should rotate between founders at different stages, because a founder who sold a company ten years ago knows less about the current market than one who raised money last year. And the body should publish, because the failure described in Part I was a failure of information more than of intent.

None of this displaces the state. Ministers remain accountable, officials continue to run the system, and public money remains under public control. What changes is that the people who feel the market directly are placed where their knowledge can alter a decision before it is renewed for five more years.

Fifteen years later

Return to the converted warehouse, and to another annual report, fifteen years after the nine reversals.

This report is shorter than its predecessor. It leads with one table: the number of companies from each founding cohort that have crossed $1m in revenue, then $10m, then $100m. The early cohorts are thin and the later ones are not. There are fewer programmes than there were, and founders can say which one they belong in. Most early rounds are led by private investors, several of whom are founders from the first cohorts investing their own proceeds. A number of companies in the room won their first contract from a government department. Some of the founders present are on their second company, the first having closed without ceremony. And a few of the people on stage are employers of several hundred, which means that for the first time the country has what every young ecosystem lacks at the start and none can do without: local proof that it can be done.

Nothing in that picture required the country to become larger, richer or luckier. It required nine decisions to be made differently, beginning with the smallest and least glamorous of them, which was to count the right thing.

Ecosystems die by decisions. That is the bad news and the good news, and it is the same news. What was decided can be decided again.

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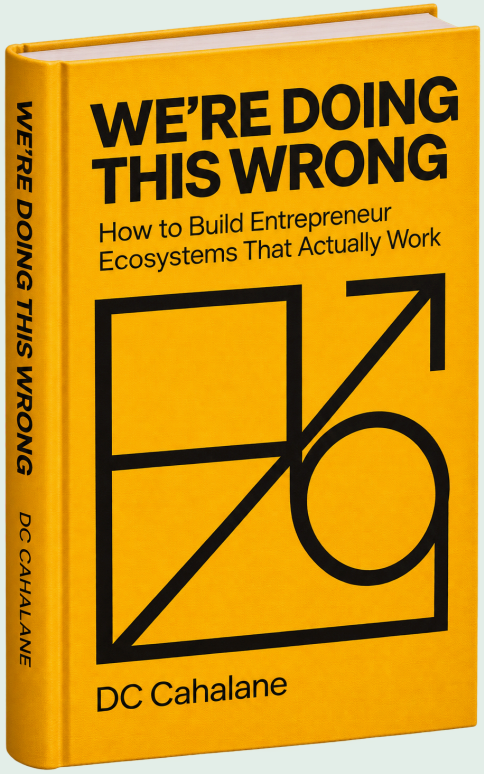
Ecosystems die by decisions. What was decided can be decided again.



A DISCUSSION SERIES FOR ECOSYSTEM BUILDERS

This paper is one part of a longer argument.

It belongs to a discussion series for ecosystem builders, based on the ecosystem architecture framework set out in the book **We're Doing This Wrong: How to Build Entrepreneur Ecosystems That Actually Work**, by DC Cahalane.

The book gives the full framework. Each paper in the series takes one question from it and works it through.

www.weredoingthiswrong.com

DC Cahalane

November 2026