



## INTRODUCING CLUSTERS OF INNOVATION

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- Davis Cook

### **It is time for de-risking the entire innovation process.**

There is a comforting illusion of control that most of us have maintained for a long time – both in business, and our personal lives. Even with the dual tsunamis of climate change and the 4th industrial revolution looming over us, most business leaders have felt at least, in some ways, in control of their fate. Strategies can be drafted, plans put in place... but none so drastic that they actually impact our day-to-day operations. Yet, the current global pandemic has torn that illusion from us; we are indeed at the mercy of forces generally beyond our control, and while we can choose how to respond, our choices are inevitably constrained by forces far beyond our control.

In this time, then, business functions that are not deemed 'essential' often tend to fall by the wayside. Indeed, we have seen many of our clients pull back on their innovation and R&D activities over the last six months – focusing instead on how to survive COVID-19. Yet, our advice has been that this is in fact *the best time to innovate*. The opportunity cost of putting in place major changes now – especially from a business model perspective – is lower than ever; while for those organisations that have been forced to change, creating a more efficient, lean structure now means that they'll be better able to compete in future. The ability to re-imagine one's business – innovation, whether product, technical, business model, or social – is therefore going to be what sets apart the leading organisations of tomorrow from those of today.

One component of this innovation – work that RIIS is heavily involved in – is around creating ecosystems or clusters of innovation; done across both industrial sectors, and geographic regions. These clusters have major benefits for participants, most importantly in de-risking the entire innovation process. High-performing innovation ecosystems reduce the financial cost of innovation for individual firms, improve the chances of success, increase the speed, and create entirely new opportunities to solve problems, when compared to more traditional 'go-it-alone' approaches. And – they have a wide number of benefits that in fact go beyond just innovation itself, due to underlying foundations of what makes innovation clusters work in the first place.

Innovation is inherently risky – we're trying to come up with new solutions that don't yet exist, and don't know if they'll be adopted even if they work; so this point likely doesn't need further elaboration. But taking this idea further suggests that risky activities are best undertaken with people you trust, and who want to achieve the same end goal that you do. In turn, trust is developed by building relationships with people over time, in pursuit of common goals. None of this should be surprising, or unfamiliar; but the underlying principle is not often applied when it



comes to the actual process of innovation. The stakeholder management of innovation is incredibly important, yet in our work a common failure of innovation programmes is that they entirely ignore this component of the work – actively building trust between stakeholders.

Building communities of practice that can deal with complex issues, under conditions of uncertainty, in pursuit of common goals – such a network goes beyond just innovation itself. The ability to work together in these circumstances also creates a broader resilience to other crisis situations – COVID-19 being a very real situation today.

Indeed, despite being a very competitive environment, our experience in working with the SA mining sector has shown the value of well-established industry level relationships during the COVID-19 pandemic. While these relationships have been built over many years, and innovation itself has not been the main driving force for them, there is a clear demonstration of innovative thinking and responsiveness in their response to the pandemic. One example of this has been the rapid development of a series of advanced leading practices for managing COVID-19, derived from information across all the major mining operations in the country, compiled into recommended business practices and guidelines, and subsequent dissemination across the industry (and in fact available for broader public usage too). What the industry has done is essentially innovate some of the best business and operating models for dealing with COVID-19, codify them, and disseminate them across their industry. This is almost a text-book definition of innovation, enabled by close working relationships amongst the companies in a way that doesn't disadvantage any, but rather strengthens the performance of the entire industry, and the communities they engage with. Not only are mining companies themselves able to maintain production levels, but their employees and connected communities also benefit through continued employment in a difficult period, improved working conditions and access to healthcare, and ultimately being able to cope better through this fraught period.

So how has this been achieved – what are the 'secrets' to an effective industry innovation cluster? Three main elements need to be in place, at both individual and organisational levels: knowledge, opportunity, and motivation.

Industry leaders – and their organisations – need to know how to share information and develop new solutions across company boundaries, in ways that are not commercially disadvantageous. These are competencies that can be learned and applied practically. Collaborative forms of innovation are driven entirely by strong processes, systems, and guidelines about what can, and cannot be done. Organisations and leaders that perform well here understand questions such as: where can we work with other organisations? What are the limits of pre-competitive spaces? What options do we have for co-operative competition with our peers? How can we work effectively with both our up- and down-stream value chain? Can we tap into 'side-stream' players (i.e. those providing complementary services to us)?

Secondly, are there specific moments in which this 'clustering' can take place? Even if they are just small projects (such as running an industry wide innovation competition), opportunities do not have to be massive projects in order to start creating value – start small and iterate quickly. An important element we have seen in our work with early-stage clusters is the value in solving small problems, not large ones. Large problems are usually extremely complex, require significant organisational and industry-wide buy-in (including sometimes major changes in policy or legislation), and often cost a lot. But solving small problems creates buy-in; they teach organisations and individuals the knowledge to solve problems, and

the skills and habits required to solve larger problems, are generally lower cost, but create cumulatively beneficial outcomes. More importantly, there are hundreds of smaller problems to solve that everyone can agree on – which creates much faster turnaround times and lower risk for innovation leaders.

Lastly, industry leaders need to have the actual motivation and desire to create a change in their sectors, industries, geographies, and communities. This doesn't mean altruism – there are direct commercial benefits that can arise from having a high-functioning innovation ecosystem around a sector, including improved competitiveness, productivity, access to technology, access to skills... so the motivation is not about just 'doing good' or 'innovation for innovation sake' but can and should be driven by a real business imperative. Yet, motivation is the key that will unlock the time needed to learn the right skill (at both an individual and organisational level), and create and take the opportunities to implement and practice relevant innovation skills, knowledge and competence areas.

In our experience, the best approach to building these clusters has been by finding a small group of committed leaders (whether inside the organisation, or across organisations), and running programmes that are small enough to fly under the radar initially, but that can create buy-in through real positive impacts. This reduces the risk of fallout when they fail (which at least some risky projects inevitably will do) and enables rapid learning for more successful future programmes.