





Field Labs @ Scale

Fieldlabs@Scale Article Series - Part 2

Collaboration in fieldlabs: The Triple Helix

Conversations with University of Twente, Waterschap Vechtstromen and Pioneering

In fieldlabs, the business community, research institutions, and government agencies come together to test new solutions to societal challenges. Everyone is working toward a similar goal, but not always based on the same logic or interests. While one party seeks speed and implementation, another wants to first understand and substantiate the approach. And while policy sets frameworks, practitioners seek flexibility. This raises the question: What dynamics determine the success or failure of collaboration within field labs?

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pioneering

Three Worlds, One Challenge

Fieldlabs bring stakeholders together around a shared societal challenge. This collaboration is often described as the "triple helix": a model in which government, research institutions, and the business community each contribute to innovation from their own perspective. The term refers not only to three types of stakeholders but, above all, to the interaction between them. This interaction can create space to define issues more precisely, develop the knowledge needed to shape new solutions, and test these solutions in practice. The question then is what this interaction yields in practice: when do the three worlds reinforce one another, and where do tensions actually arise?"

For this article, we spoke with **Stefan Nijwening**, Innovation Manager at Waterschap Vechtstromen; **Leentje Volker**, Professor at the University of Twente (Department of Civil Engineering and Management); and **Hans Hilbrands**, Director at Pioneering. From their various roles within the triple helix, they paint a nuanced picture: Fieldlabs are powerful catalysts for innovation, but they also bring together divergent interests and working methods. This is both their strength and their greatest challenge.

Different Qualities Reinforce One Another

For Stefan Nijwening, the strength of field labs lies in bringing together different perspectives. To him, field labs are primarily meeting places where challenges and solutions come together.

Hans Hilbrands sees the same added value; in his view, the strength lies primarily in the fact that each party represents a different phase of the innovation process. While governments set the agenda for societal challenges, research institutions contribute research and in-depth analysis. Entrepreneurs add a practical perspective and ensure that ideas are actually tested and implemented. According to Hilbrands, the greatest value is created when these qualities reinforce one another and innovations do not get stuck in research or test environments, but actually find their way into practice.

Leentje Volker sees this added value not only in the combination of qualities and interactions, but also in the connections that endure afterward. Because companies, government agencies, and research institutions come together within a field lab, connections are formed that would be less likely to emerge outside of existing collaborative structures. These connections can then lead to new projects, new flows of knowledge, and sometimes even new revenue models. She also noted that because a field lab operates (partly) independently of existing organizational processes and patterns, it creates space to think and collaborate in ways that are often not possible within the primary processes of organizations.

Where the Friction Begins

Still, a collaboration in which the parties reinforce each other's strengths is not a given. Because governments, research institutions, and businesses have different ways of working, tensions inevitably arise.

For Hans Hilbrands, a key source of tension lies in the different paces at which these three worlds operate. Governments operate within political cycles, research institutions within (multi-year) research programs, and the business sector responds to market dynamics and commercial opportunities. What seems like a logical timeframe to one party can quickly feel too slow—or perhaps too rushed—to another. When these rhythms don't align properly, misunderstandings and

delays arise.That is why Hilbrands advocates for a greater focus on the transition from experimentation to implementation. It's not just about exploring what's possible, but also acting more quickly when solutions become available. According to him, many societal challenges—such as climate change, circularity, and raw material scarcity—require a greater sense of urgency than is currently evident in innovation processes. Research and development projects can take years, while the issues requiring solutions are increasingly emerging right now. In his view, innovation sometimes gets bogged down for too long in research and experimentation, whereas application and implementation should receive more attention. "Together, we've created a system with a rhythm that everyone feels comfortable with, but one that often lacks a sense of urgency and fails to convey that we really need to do things differently today."

Leentje Volker observes, above all, friction between the interests underlying the various parties. The survival of companies depends on making a profit; governments are responsible for protecting public values; and research institutions are judged on their ability to develop new knowledge. In a healthy ecosystem, these interests reinforce one another. But when parties begin to compete for each other's positions, cooperation can actually become difficult. To illustrate this, she cites the example of an orange: as long as one person uses the peel, another uses the juice, and a third finds a use for the pulp, value is created for everyone. As soon as everyone tries to claim the same piece, friction arises.

Trust as an Invisible Success Factor

For Stefan Nijwening, the key to successful collaboration ultimately lies not in structures or financial models, but in trust. "You have to put yourself out there," he says. "Acknowledge that you may not have defined the problem properly yet, that you don't know everything, or that another party might ask a better question than you do. " Only when parties dare to be vulnerable and are open to other perspectives does space for true innovation emerge.

"That requires safety, clear rules, and a willingness to let go of preconceptions," says Nijwening. Governments sometimes view companies as entities that are solely interested in making a profit. Companies, on the other hand, often perceive governments as bureaucratic and slow. Research institutions are frequently seen as theoretical and far removed from practical reality. According to Nijwening, these perceptions do not always hold true in practice: "Most of the companies we work with are deeply committed to social issues. And there are actually very entrepreneurial people working within government agencies as well." The most successful field labs emerge when those stereotypes disappear and people begin to see each other as partners rather than representatives of a particular sector.

His advice for a successful field lab best sums up this idea: "Seek out nice people." Behind that simple statement lies a serious observation: "Successful innovations often arise because curious, enthusiastic people find each other and dare to take risks together."

"[Collaboration] requires safety, clear rules, and a willingness to let go of preconceptions."

Scaling up requires more than just good technology

The three interviewees agree that they do not view scaling up as a technical problem. The real challenge arises when a promising pilot project must evolve into a structural change in policy and practices within organizations.

For Leentje Volker, scaling up is about building an ecosystem in which stakeholders continue to reinforce one another, even after an experiment has ended. Not only do technology and funding play a role in this, but so does capacity. According to her, many organizations are experiencing a growing shortage of people and time to devote to innovation or knowledge development. Due to staff shortages and high workloads, there is often little room left to experiment or actively support new innovations. By collaborating and sharing workloads and burdens, however, the space to continue innovating does emerge.

For Hans Hilbrands, the key lies in clarity regarding roles and a shared focus on social impact. In his view, scaling up requires parties that not only collaborate on generating new knowledge but also take joint responsibility for its implementation.

For Stefan Nijwening, it ultimately comes down to people. He observed within his own organization that successful pilot projects do not always lead to actual change. “You end up with wonderful pilot projects, but ultimately, little changes within the organization.” In his view, scaling up therefore requires, above all, buy-in, organizational change, and a culture in which people are open to new ways of working.

The Lesson for Fieldlabs@Scale

The perspectives of Leentje, Stefan, and Hans show that the power of field labs lies not only in testing innovations, but above all in connecting worlds that normally operate in isolation from one another. Scaling up requires more than just a (technically) viable solution; the interaction between government, research institutions, and the business community makes it possible to tackle complex societal issues from different perspectives. At the same time, this collaboration requires constant nurturing. Different interests, different paces, and different working methods are essential for generating new insights but inevitably lead to tensions. Innovations developed in field labs arise not in spite of, but because of these differences. By leveraging each other’s strengths, having confidence in the shared goal, and acknowledging each other’s pace, field labs can make a significant contribution to alleviating today’s societal challenges.

Field Labs @ Scale

Fieldlabs@Scale is working with an interdisciplinary consortium to explore ways to scale up mission-driven innovations in sectors such as smart industry, healthcare, agriculture, and infrastructure. The goal is to further expand the innovations—which are difficult to scale up—that emerge in field labs and to strengthen their impact on societal returns.

Read more about the project here.