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Startup Village conceptualisation

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Contents

Abstract

The European Commission's long-term vision for the EU's rural areas identifies several areas of action towards stronger, connected, resilient and prosperous rural areas and communities by 2040. A flagship action on research and innovation aims to help tackle the challenges towards fulfilling rural potential. An annual Startup Village Forum is part of this action. The Forum intends to promote knowledge exchange and cooperation activities and to work as an open and inclusive space where institutions and stakeholders can meet, discuss and shape actions for startup-driven innovation in rural areas. Drawing upon the scientific literature, in this report we develop the Startup Village concept and define it as "A place (or a network of small places) that embraces innovation and ambitious entrepreneurship as a way to unlock development potential and support wellbeing in rural areas". Next, we explore the key enabling factors of Startup Villages- discussing in particular the pivotal role played by the ecosystem in enabling innovation and entrepreneurship - and outline the Startup Village Forum's facilitating role.

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Executive summary

The European Commission's long-term vision for the EU's rural areas identifies several areas of action towards stronger, connected, resilient and prosperous rural areas and communities by 2040. A flagship action on research and innovation aims to help tackle the challenges towards fulfilling rural potential. An annual **Startup Village Forum** is part of this action (European Commission 2021b). The Forum intends to promote knowledge exchange and cooperation activities and to work as an open and inclusive space where institutions and stakeholders can meet, discuss and shape actions for startup-driven innovation in rural areas.

This report draws upon the scientific literature to develop the Startup Village concept, explore enabling factors, and outline the Startup Village Forum's facilitating role. A Startup Village can be defined as:

> *A place (or a network of small places) that embraces innovation and ambitious entrepreneurship as a way to unlock development potential and support wellbeing in rural areas. By combining local place, people, and purpose with external knowledge, resources, and markets, the Startup Village strives to provide favourable conditions for entrepreneurial and innovative ecosystems to flourish.*

The paper introduces five key conceptual building blocks: **innovation, entrepreneurship, rural space, multiple scales, and ecosystems**. Each building block has an established literature but understanding how they interact is crucial. Tailoring and testing connections and causal relationships between different concepts and blocks through empirical examination remain vital.

The paper considers the baseline requirements for **targeting support and resources** and introduces a **readiness level framework** for progressing villages from envisioning change, through experimenting, to demonstrating and sharing learning.

The work elaborates on the pivotal role played by the ecosystem building block in enabling innovation and entrepreneurship. It offers an approach that links the **resources and institutional elements that ecosystems need with the multi-scalar networks necessary for effective rural development**. This requires proactively designing for both locality and connectivity.

Both entrepreneurs and institutions in rural areas require **support to build capacities**. Ecosystems can support entrepreneurs, but institutions need to be able to support ecosystems. The paper outlines the main capacities needed and notes the role of **knowledge exchange**.

Finally, the paper addresses the future for the Startup Village Forum. The Startup Village concept is not intended to be a standalone initiative, but works to **connect** knowledge and stakeholders, **complement** existing initiatives, and **catalyse** joint endeavour. The annual Forum thus has an important role as a coordination space across the quadruple helix, where learning can be shared and motivation renewed. An indicative list of knowledge exchange topics for future forums is provided.

1. Introduction

On 30 June 2021, the European Commission set out a long-term vision for the EU's rural areas over the next two decades. The vision identifies several areas of action towards **stronger**, **connected**, **resilient** and **prosperous** rural areas and communities by 2040.

Rural areas are home to around 140 million people, representing some 30% of the EU population and over 80% of EU territory. Rural areas are a core component of the European way of life and identity. They hold **diverse potential** – and face **shared challenges**. In recent decades, social, economic, and demographic transformations such as globalisation, urbanisation and ageing have challenged rural communities. Some areas face depopulation, and many Europeans remain worried about eroding rural infrastructure and service provision. Others express concerns about shrinking employment opportunities, declining income, or limited transport and digital connectivity that limits access to markets (European Commission 2021b).

The COVID-19 pandemic's asymmetric impact on European territories has added uncertainty to vulnerability. But, as economies adapt and people look to a better quality of life, promising new perspectives have also opened. Increasingly too, **the nature and sources of innovation are changing**. Digital technology makes location less important for collaboration and breakthrough ideas. Emerging opportunities for rural areas include: sustainable transitions to green growth; new industries like the bioeconomy; flexible employment; and new recognition for under-utilised potential such as women's entrepreneurship and the 'silver economy'. In this context, rural areas can **turn vulnerabilities into geographies of opportunity** (OECD 2020).

Rural development cannot succeed on ambitions alone, however. **Supportive policy, multi-level governance, research and practice** need to effectively dovetail. Often, city-centric regional development and innovation policies have overlooked rural potential (Harrison & Heley 2015, MacKinnon et al. 2022). Research has repeated seeming truisms about agglomeration and institutional thickness with limited empirical validation (Gibson & Brennan-Horley 2018, Huber & Fitjar 2018, Shearmur 2012). Meanwhile, long associations between rural areas and agriculture, and a 'consumption countryside' (Marsden 1999) based on food and tourism can constrain innovative thinking about more diverse 'lines of flight' (Willett 2021) for rural places, people, and futures. Rural areas are often portrayed as places where there is no innovation or, at best, where the existence of severe constraints limits any innovation process (Glückler et al. 2022). Yet, **there is widespread evidence pointing out that all forms of innovation occur in rural areas** (European Commission 2021a, 2021c, Fitjar & Rodríguez-Pose 2011, Grillitsch & Nilsson 2015, Shearmur 2015). Besides, peripheral and rural areas can offer favourable, unique, conditions for innovation. Such potentials include, for example, short distance to specific natural resources or a specific climate, a protective space for experimentation, high institutional leeway, soft factors (high quality of life, a laid-back natural environment, local traditions and a certain image of rural areas which can be beneficial for the marketing of products, etc.) and cost incentives. When the differences across innovation types and stages are taken into account, it becomes clearer that some innovation process can work better in the periphery than the centre (Baumgartinger-Seiringer et al. 2022, Eder & Tripple 2019, Glückler et al. 2022, Shearmur 2015). **Peripherality can provide advantages to certain typologies of innovation** that require slowness, radical departure from prevailing (urban) norms or resources (such as space, specific fauna, testing grounds, local culture) (Grabher 2018). Examples include resource-efficiency driven innovations in farming, process optimisation in food and bio-based industries, social innovation changing value chain organisation, service provision or valorisation of cultural heritage. Technical and technological innovations in the sectors related to the management of natural resources also mostly happen in rural areas (European Commission 2021a, 2021c).

On a more general level, harnessing the development potential of rural areas requires moving beyond the narrow economic metrics of growth, productivity and competitiveness (Moore & Woodcraft 2019, in MacKinnon *et al.* 2022), which have marginalised and depict rural areas as underperforming places. There is a need to embrace "a broader approach that incorporates the social, political and environmental as well as economic dimensions of 'development' promises to generate a fuller understanding of the social and economic activities, infrastructures and assets found in such places and open-up new angles for policy to address their predicaments" (MacKinnon et al. 2022: 6).

Against this conceptual background and building on the results of existing EU initiatives for rural innovation, the long-term vision for rural areas recognises the enabling role of innovation to empower citizens and entrepreneurs to seize new opportunities. This is a crucial step. A **flagship action on research and innovation for rural communities** aims to help tackle the challenges for fulfilling rural potential, in ways

that support well-being and foster economic vitality. An annual Startup Village Forum is part of this action, within the theme of stronger rural areas.

The Startup Village Forum was launched at a live broadcast virtual event on 16 November 2021. Bringing science-based and community-based knowledge together with high-level political traction, the launch highlighted several common themes for future action:

— **Embracing rural innovation potential by erasing the myths and fostering the opportunities.**

— **Valuing, maintaining, and catalysing rural diversity for stronger rural areas.**

— **Creating the framework conditions to help innovation thrive in rural areas.**

— **Engaging multiple levels of governance in joint endeavour for shared challenges.**

— **Developing innovation by and for rural communities.**

The Startup Village concept encapsulates these ideas by envisioning big ambitions from small places. Startup Villages are not intended to be a new, standalone initiative, but to provide a shared ambition to connect, complement, and catalyse endeavour. It can function as linking device to work together with existing initiatives, organisations and networks, including: Smart Villages, LEADER, the European Innovation Partnership on Agriculture Productivity and Sustainability (EIP-AGRI), Living Labs, the thematic smart specialisation partnerships, Horizon Europe research and innovation projects, Partnership for Regional Innovation (PRI), the European Institute of Innovation and Technology (EIT) and its Knowledge and Innovation Communities (KICs), the European Network for Rural Development (ENRD) and the European Innovation Council.

A Startup Village is a way to re-imagine what villages can be and do and the roles that innovation and entrepreneurship with ambition to grow and tap into extra-local markets and global production networks can play in strengthening rural areas.

Turning a vision for Startup Villages into action and achievements in real places requires building solid conceptual foundations from the existing base of theory and evidence, plus advancing an agenda for future learning and knowledge exchange. This science for policy report takes up that task.

This report develops an initial conceptualisation of Startup Villages by exploring three primary questions:

1. **What is a Startup Village?**
2. **How can Startup Villages be enabled?**
3. **How should the Startup Village Forum operate?**

Each question is addressed in a section of the report, which is structured as follows. **Section 2** asks: what is a Startup Village? The section provides an initial definition of a Startup Village and breaks the concept down into five key building blocks: innovation, entrepreneurship, rural space, geographical scales and ecosystems. By briefly outlining relevant insights from the scientific literature and noting current gaps in knowledge, the section identifies how the Startup Village concept can add value in the rural and regional development landscape. Several strategic propositions for policy and practice are also offered.

Section 3 explores the hard and soft enabling factors required to translate the Startup Village concept from theory to practice. The section advocates a pragmatic approach that recognises that not all villages will be (or wish to become) Startup Villages, balanced with inclusive tools for baseline assessment and progression. The section elaborates the ecosystems building block through a multi-scalar perspective that remains place-based without becoming place-bound.

Finally, **Section 4** considers the coordinating role that the annual Startup Village Forum can play in bringing together stakeholders and sharing learning. The section reiterates the importance of interaction across the quadruple helix (governance, research, enterprise, and civil society), and offers suggestions for knowledge exchange at future editions of the Forum.

2. What is a Startup Village?

At the basis of the Startup Village idea is the strong belief that innovation and entrepreneurship, in particular startups with ambitions to innovate and grow, can play a key role in seizing the opportunities that current societal, environmental and digital transformations offer to revitalise rural areas and communities.

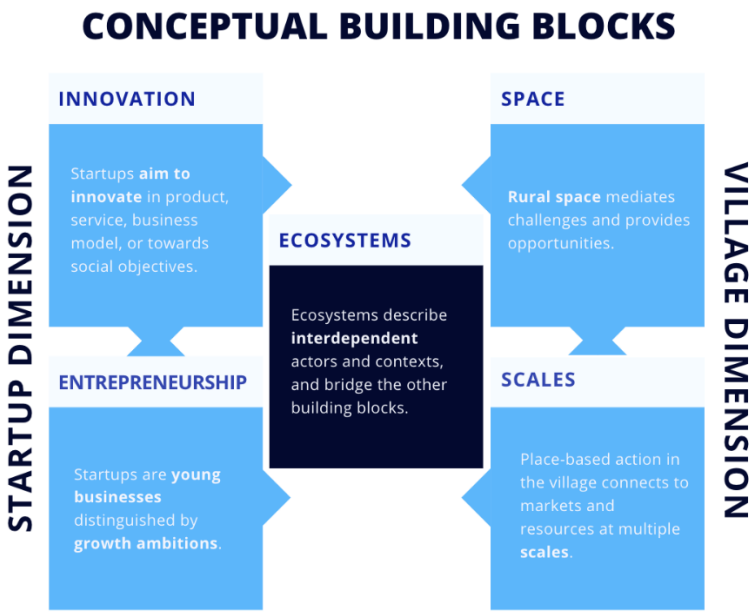
The following is an initial definition that describes the Startup Village as:

> ***A place (or a network of small places) that embraces innovation and ambitious entrepreneurship as a way to unlock development potential and support wellbeing in rural areas. By combining local place, people, and purpose with external knowledge, resources, and markets, the Startup Village strives to provide favourable conditions for entrepreneurial and innovative ecosystems to flourish.***

The Startup Village idea is closely related to the Smart Village initiative. Both concepts share the same goal: to promote rural well-being by transforming rural areas into attractive places to live and work and harnessing their development potential. Smart villages rely on a participatory approach to develop and implement development strategies to improve their economic, social and environmental conditions, in particular by mobilising solutions offered by digital technologies (European Commission 2020). Startup Village idea focuses on innovation and ambitious entrepreneurship to connect local businesses to extra-local production networks and tap into wider markets, resources and knowledge to enhance the competitive performance of rural areas.

This section unpacks that definition by identifying five key conceptual building blocks. Because the Startup Village concept combines two dimensions – startups and villages – the first four building blocks can be understood as two inter-related pairs: 1) **innovation** and 2) **entrepreneurship**, and 3) **rural space** and 4) **multiple scales**. The fifth building block, **ecosystems**, provides a unifying and enabling 'glue'.

Figure 1. Startup Village conceptual building blocks.



The representation of the building blocks immediately above raises two important points. First, **these building blocks do not exist in isolation, but interact in ways that shape opportunity and influence outcomes**. Recognising the interaction of innovation and entrepreneurship in rural space and its deployment within nested and multiple scales is crucial to advancing the Startup Village concept, especially in terms of drawing insights from the literature. In other words, 'what works' for one building block cannot be simply applied to Startup Villages without reflecting on how the other building blocks may influence the outcomes. **Tailoring and testing connections and causal relationships between different concepts and blocks through empirical examination remain vital** to challenge and/or avoid falling into the trap of the 'conventional wisdom' (Galbraith 1958). For example, the assumption that underpins many local development policies that local firm-

level innovation supports local development is not always proven to be true. The causal link may be valid in certain contexts and not in others. If innovators in rural areas collaborate more with external partners when they are expanding this will limit their impact on local development processes (Shearmur & Dolourex 2022). Likewise, not all entrepreneurial activities have the potential to spur economic development (Nightingale & Coad 2013, Sternberg 2022).

Second, placing ecosystems at the centre is a somewhat novel approach. Typically, ecosystems are understood as the generative context within which innovation and/or entrepreneurship occur. By instead **conceptualising ecosystems as an enabler *through* which the building blocks combine** it becomes possible to treat Startup Villages in more tailored ways, rather than 'shrinking' urban-oriented policy. These implications will be further discussed in Section 3.

2.1. Innovation

Innovation is essential to the Startup Village concept – after all, innovation is key to overcoming challenges and unlocking new opportunities. Within the Startup Village concept, the innovation building block has four components, which are described in this sub-section:

- **A broad definition of innovation.**
- **An emphasis on inclusiveness and impact.**
- **A place-based approach to problem-solving.**
- **An awareness of transformative resilience.**

Innovation is an elusive concept which is difficult to define. It can be broadly understood as **new combinations of knowledge and resources**. The OECD and Eurostat's (2018) influential Oslo Manual differentiates product and business process innovations. More recently, social innovation has become a growing area for research, policy, and practice (BEPA 2011). Forms of 'frugal innovation', which aim to do more with less, have also gained attention (Prabhu 2017). This wide potential reflects a shift in understanding from an exclusive focus on new technology, towards recognising innovation as an application (Godin 2015) – a 'how' rather than a 'what'. Innovation is not merely a product of R&D activities and codified scientific and technical knowledge. Innovation with a market impact are more likely to come from the workforce, suppliers, consumers and their interactions rather than researchers (Rosenfeld & Wojan 2016). In the literature these two different innovation modes are described as the Science, Technology and Innovation (STI) mode and the experienced-based mode of learning and innovation based on Doing, Using and Interacting (DUI-mode). At system level, the tension between these two innovation modes requires to reconcile and combine formal processes of R&D to produce codified knowledge with those based on the learning from informal interaction within and between different organisations resulting in competence-building and tacit knowledge. At firm level, this tension may concern the need to reconcile the use of ICT as tools for codifying and sharing knowledge with strategies emphasizing the role played by informal exchanges and communities of practice in mobilizing tacit knowledge for problem-solving and learning (Jensen et al. 2007: 280). Understanding innovation in such a multifaceted way offers ways to better **recognise and include the diverse opportunities for innovation in rural areas**. These opportunities include improved or new types of production and processes, business models or innovations that are not exclusively driven by profit. These types of innovation, however, are often overlooked by standard policies and programmes for innovation which tend to focus on R&D investments (OECD 2022).

Innovation is an inherently social process. To innovate firms do not only depend on their internal knowledge and resources, but also rely upon the knowledge obtained by external sources (customers, suppliers, competitors, research organisations, etc.) and collaborations with partners. Such innovation and learning dynamics refer to the 'open innovation' paradigm (Chesborough, 2003). Firms innovate by developing new knowledge which is the result of the combination of external information and expertise with internal capacities. Certain territorial contexts are considered to be more conducive to this than others. Dense urban areas, clusters and districts provide a set of conditions which are considered beneficial for innovation (see among others Duranton & Puga 2001, Glaeser 2011, Storper & Venables 2004). On the contrary, the lack of agglomeration is widely considered as an inhibiting factor for innovation in rural and peripheral areas. Spatial proximities are critical for innovation, however it is equally acknowledged that these relationships are not universally positive, but more nuanced than often assumed (Coenen & Morgan 2019). There are other forms of proximity such as cognitive, organisational, social and institutional proximity that may act as a substitute for

geographical proximity (Boschma 2005) and firm characteristics can be more important than location for innovation (Lee & Rodríguez-Pose 2013). Empirical evidence shows that innovation strategies tend to be different in peripheral areas, where firms rely more on internal capacities, technical knowledge and non-local links to compensate for a lack of opportunities to access local knowledge spillovers (Fitjar & Rodríguez-Pose 2011, Grillitsch & Nilsson 2015, Shearmur 2015). In addition, digital technology makes location less important for collaboration and innovative ideas, providing new opportunities for workers and businesses in rural and peripheral areas. For example, customised, design-oriented manufacturing offers rural areas new opportunities to tap into a growing global market for place-based and design-oriented products (Rosenfeld & Wojan, 2016).

Although novelty – 'something new' – is crucial to innovation, there is a scalar dimension. The Oslo Manual (OECD 2018) distinguishes between innovations that are **new to the firm, new to the market, and new to the world**. For example, a product or process may be new to a local firm but established internationally. Firm level innovation has an important role to play in business productivity and performance (OECD 2009) and should be fostered. Equally, however, exclusively viewing innovation at the level of small firms or hyper-local markets can create a tendency to celebrate myriad minor activities as 'innovative', regardless of results. Consider a small business getting a website: although new for the firm, this is late adoption of a now ubiquitous technology, and would likely have little real impact unless accompanied by new sales channels or business model changes. There is a link here to the role of 'ambitious entrepreneurship' (Stam et al. 2021), discussed in the next building block.

This example points to two issues that the Startup Village concept must overcome. First, there is a risk that over-using the term 'innovation' may backfire, reinforcing rather than rejecting stereotypes of rural areas as behind the times. Second, there is a potential tension between providing support for firm level innovation and realising the potential of innovation as a mechanism for achieving more substantive policy goals. Resolving this tension requires combining **inclusiveness with impact**. That is, Startup Villages should welcome a wide variety of innovative 'hows' while maintaining a strategic focus on 'why'.

The 'why' of innovation can be constructively linked to the multiple scales building block, by considering **the village as a practical scale for identifying purposive outcomes**. The emphasis on addressing challenges in the social innovation (Polman et al. 2017), smart specialisation (Foray 2015, Gianelle *et al.* 2020, McCann & Ortega-Argilés 2016) and mission-oriented innovation (Mazzucato 2018) literatures offers one approach for mobilising innovation in a place-based approach to problem-solving. This implies a reformulation of inclusive innovation starting from social needs and connecting them to related economic activities. This does not imply rejecting all the elements of growth-oriented policies rather taking a different, more pragmatic, perspective guided by specific community challenges and experimental principles (MacKinnon et al. 2022). In some villages, solving problems may lead to conventional goals and policy instruments for employment and growth; in others, social or environmental objectives may be more important. In still other cases, it could be a combination of approaches, objectives and policy instruments.

Of course, innovation cannot be treated as a 'magic bullet' that automatically delivers desirable outcomes. **Innovation is a necessary but not sufficient condition for local economic development**. Innovators who want to scale up will tend to expand their activities into areas which are more conducive to the further development and marketing of innovations (Shearmur and Dolourex 2022). Besides, "creative destruction" (Schumpeter 1942) can displace competitors, replace employment, and produce negative externalities like pollution. Rural areas have historically witnessed these processes through waves of mechanisation and offshoring. There are current concerns that valorising social innovation may mask the withdrawal of state-funded services from rural areas (Bock 2016). This is not to argue against change – many agricultural and industrial technologies have had long-run societal benefits, just as traditional service models must adapt to modern needs. But there is a need to support transformational resilience (Giovannini et al. 2020) at the village scale – **ensuring that rural communities can participate in and drive the transformations that innovation can bring while supporting their well-being**.

2.2. Entrepreneurship

Startups are an explicitly entrepreneurial category. Within the Startup Village concept, the entrepreneurship building block has the following four components, outlined in this sub-section:

- **A synergistic connection with innovation.**
- **A targeted definition of a startup, bridging criteria and holistic performance.**

— **An emphasis on opportunity and ambition.**

— **An awareness of entrepreneurial behaviour.**

Entrepreneurship concerns "how, by whom and with what effects opportunities to create future goods and services are discovered, evaluated, and exploited" (Shane & Vankataraman 2000: 218). Entrepreneurs are the actors who commercialise inventions and ideas, by transforming knowledge into economically exploitable knowledge. They serve as vehicle for innovation and change (Carree & Thurik 2010) and are the source of knowledge spillovers in the economy (Henrekson & Stenkula 2010). Generally, countries that have experienced an increase in entrepreneurship have also benefitted higher rates of growth. However, the actual mechanisms of how entrepreneurship generate economic development are less clear (Carree & Thurik 2010). The territorial and institutional context, in combination with other contextual factors and person-related capacities, affects entrepreneurial decision and behaviour and the success (or failure) of new economic activities (Boettke & Coyne 2004, Sternberg 2022). Without an enabling and supportive environment, entrepreneurs will not enter the market or prosper if they do (Grover et al. 2022).

Clearly, there are close connections between entrepreneurship and innovation, yet they can exist independently and are not interchangeable terms: not all entrepreneurs are innovative, and not all innovations are developed by entrepreneurs. Because innovation and entrepreneurship are thus distinct building blocks, **synergies need to be created** between them.

Startups can encapsulate these synergies. Although the term 'startup' is sometimes used to refer to any new business, a more precise definition aids policy and practice. "Startups in general combine fast growth, high reliance on innovation of product, processes and financing, utmost attention to new technological developments and extensive use of innovative business models, and, often, collaborative platforms" (European Commission 2016: 2). The main difference with a small business or an entrepreneur is that the startup is innovation driven and operates in a highly uncertain environment (Acs 2010), intends to grow fast and gain more market shares and seeks external financing, while small businesses tend to grow proportionally to their own financial resources.

The EU Startup Monitor (Steigertahl et al. 2018) defines a startup according to **business age, innovation activity, and aim to scale**. This baseline definition echoes an interest in the literature in identifying the specific organisational criteria that qualify as entrepreneurial (Audretsch 2012). Criteria matter, because business support funding is ultimately limited, and resources need to be efficiently allocated. For example, applying a combination of size and age criteria can channel support to help new businesses grow.

Criteria-based approaches raise two implications for the Startup Village concept. First, **the concept needs to be targeted. Rather than supporting any and all rural businesses, a public intervention for Startup Villages should foster, attract, support, and retain *specific types* of business**. The distinction between 'opportunity' and 'necessity' entrepreneurship (Fairlie & Fossen 2018) explains this point. Entrepreneurial choice theory views individuals as having an (ideal) choice between earning income through employment or starting a business (Audretsch 2012). Some entrepreneurship is by necessity because employment choices are constrained. Some entrepreneurship remains 'income substitution' – satisfying the owner's income needs. There is nothing wrong with these kinds of business, which can be part of entrepreneurial ecosystems and contribute to vibrant, attractive rural areas. However, they are often a poor soil for nurturing or realising policy objectives. Stam et al. (2012) hence use the term '**ambitious entrepreneurship**' to describe value-added activities that contribute to economic development. Within the Startup Village context, public action should primarily focus on supporting entrepreneurial initiatives with ambitions to innovate, scale up and grow.

The second implication for Startup Villages is a caution, however. Emphasising ambition and narrowing criteria to 'pick winners' can lead regional decision-makers to over-focus on high growth potential firms – or (fabled) 'unicorns'.[1] Such approaches have poorly served rural areas, and tend to treat stunning examples like Silicon Valley as 'one-size-fits-all' models rather than exceptions (Audretsch 2021, Clark 2013). There will be little value in the Startup Village concept replicating this flawed thinking at a different space and scale.

More so, policies that favour high growth often fail to recognise that **entrepreneurship can have productive, unproductive, or destructive outcomes** in terms of net societal contribution (Baumol 1990). For this reason, using organisational criteria as a predictor of potential needs to be bridged with entrepreneurship performance (Audretsch 2012) as measure of actual impact. Although business performance is conventionally measured

[1] A 'unicorn' is a privately-owned startup valued at over $1 billion USD.

through innovation, growth, or both, **more holistic metrics** such as incomes and job satisfaction (Van Praag & Versloot 2007) become especially meaningful in a place-based perspective. This point will be revisited in the multiple scales building block below, along with the importance of considering businesses not only as site of production but also as a social actor embedded in various form of relations across multiple scales. Entrepreneurs can tap into wider (extra-local) markets, resources and knowledge to enhance competitive performance (Dubois 2016).

Finally, supporting Startup Villages leads to practical questions about **how and why entrepreneurs recognise and exploit opportunities**. In the entrepreneurial behaviour literature, the 'individual-opportunity nexus' (Shane & Eckhardt 2010) recognises that some individuals are more likely to discover a business opportunity than others. Influences range from cognitive processes (such as willingness to incur risk) to soft skills. Individual choice and serendipity will always exist largely beyond policy reach (except for behavioural 'nudges'). But understanding the **dynamic social, spatial, and institutional contexts** that enable entrepreneurship (Welter et al. 2019) is vital in rural areas where this knowledge remains under-developed and under-utilised. This leads to the next building block: rural space.

2.3. Rural Space

The previous two building blocks – innovation and entrepreneurship – relate to the 'what', 'how', 'why' and 'who' of the Startup Village concept. Rural space introduces a mediating 'where'. The rural space building block has the following components:

- **An understanding of rural heterogeneity.**
- **A sensitive approach to rural conditions and challenges.**
- **An inclusive and wide-ranging view of rural potential.**
- **A recognition that innovation and entrepreneurship are necessary for rural development.**

As a spatial category, 'rural' broadly describes non-urban areas. However, **rural is a highly heterogeneous category**. Different rural areas have different social, spatial, economic, and environmental characteristics and potentially different policy needs. Rural diversity has two important implications for the Startup Village concept. First, the concept must recognise and respond to both the similarities within and differences between rural areas. This requires a **sensitivity to rural conditions and consequent support needs**, while countering preconceptions that rurality is an inherent business liability (Clausen 2020) that automatically limits opportunity.

The fine-grained aspects that make rural places unique are best approached at place-based scale. But broader spatial differences can be usefully understood through the OECD's (2020) **threefold rural typology**: 1) **rural inside functional urban areas**; 2) **rural close to cities**; and 3) **remote rural**. Although urban distance does not determine rural conditions, it does influence, for example, access to services, labour, markets and entrepreneurial performance (Naldi et al. 2015). Thus, space mediates the potential challenges for rural innovation and entrepreneurship, such as restricted market size, lack of agglomerative capacity, and institutional 'thinness' (Fortunato 2014, Fuller-Love et al. 2006, Müller & Korsgaard 2018). Often, these challenges will be balanced by different opportunities, as the table below suggests.

This leads to the second implication for the Startup Village concept. Because rural inside functional urban areas are typically better positioned to take advantage of larger economies and existing ecosystems, there is a risk of reproducing existing economic patterns and spatial inequalities. The Startup Village concept needs to **work inclusively across rural heterogeneity** – little will be achieved if the concept only caters for those areas that already face the fewest challenges.

Table 1. Opportunities and challenges by rural type.

Rural type	Opportunities	Challenges
Rural within functional urban areas	Functional urban areas provide relatively good access to services, institutions, markets, labour, and knowledge. Startup Villages in this spatial category may benefit from, knowledge spillovers, agglomeration effects including sectoral clusters and related diversity and easier access to national and international markets without incurring in the higher costs of urban core areas. They are more likely to attract 'spillover' entrepreneurship from the city and to be supported by existing governance initiatives.	Urban benefits cannot always be assumed. Because villages within functional urban areas are closely affected by urban change, processes such as de-industrialisation and city shrinkage may have knock-on rural effects. Startup Villages in these circumstances may have new roles to play in fostering local resilience and pursuing new economic paths.
Rural close to cities	Proximate rural-urban connectivity can facilitate short supply chains and access to markets. Startup Villages in this spatial category may have the twin benefits of a rural quality of life within reach of the city. They are more likely to attract workers and entrepreneurs to relocate. In theory, digitization can help this process.	Urban proximity does not always translate to infrastructure and investment. Rural areas close to cities can be poorly served by city-centric governance that presumes access. Startup Villages in these circumstances may need new solutions to exploit urban proximity. They may also wish to preserve local identities and sense of place.
Remote rural	Remote rural areas largely depend on the local environment for primary economic activities and comparative advantage. Startup Villages in this spatial category are more likely to exploit place-based resources such as natural resources, local amenities, creativity and cultural heritage. Entrepreneurship is more likely to be locally embedded. To overcome remoteness and the lack local knowledge spillovers, companies in these areas need to rely on extra-local networks to gain access to new knowledge and expertise.	Remoteness creates challenges for access to services, markets, and labour. Many remote rural areas particularly face depopulation challenges. Startup Villages in these circumstances will need solutions for overcoming distance. They are also likely to need support through pressures created by business expansion.

Both implications reinforce the point that **enterprise policies ostensibly designed for urban businesses may not be suitable for their rural counterparts** (Habersetzer et al. 2021). However, this raises an additional issue which is apparent in the existing evidence base. Generally, research on innovation and entrepreneurship falls into four groups, depending on approach to space and scale: non-spatial studies, which do not consider geographical effects; regional studies; rural studies; and studies of peripheral areas (which may

or may not be rural). All these studies can offer valuable information, but findings can sometimes conflict and applicability cannot be presumed. By and large, for example, the innovation literature does not focus on rural areas and it is difficult to know whether 'what works' for innovation is actually transferable to a rural milieu (European Commission 2021c).

At the same time, the rural entrepreneurship literature has tended to neglect innovation, instead advancing the argument that rural SMEs are benevolently 'different' to those in urban areas. Although claims that rural businesses are more community-minded or prioritise well-being can be appealing, these ideals may be a case of 'romancing the rural' (Gaddefors & Anderson 2019) rather than reflecting robust evidence (Dodd et al. 2021, Lee & Cowling 2015). Thus, while the Startup Village concept must reflect rural differences, care should be taken to **avoid diluting the essential focus on innovation and ambitious entrepreneurship** with too many 'special' rural exceptions.

Finally, scholars debate whether rural entrepreneurship should be distinguished from 'entrepreneurship in the rural' (Korsgaard et al. 2015a) – that is, the difference between locally embedded businesses plus distinctively rural sectors (land-based or agri-food enterprises), and businesses that merely have a rural postcode. A sectoral approach can target funding and resources, but risks rehearsing stereotypes about rural areas and missing emerging opportunities. There is also evidence that traditional industries in more peripheral areas have lower levels of innovation (Tödtling & Kaufmann 2001). The Startup Village concept should **embrace a wide range of potential opportunities**, without being limited to specific sectors. The role of embeddedness will be discussed in the village scale building block.

2.4. Multiple scales

The Startup Village concept relies on nested and multiple scales, where the village represents the central spatial scale. Within the concept, the geographical scales building block has the following components:

- **A view of the village as a coherent scale for action.**
- **A place-based approach.**
- **A positive alignment between place-based priorities and startup activities.**
- **A pragmatic recognition that not all villages will be Startup Villages.**

Villages encompass a range of rural settlement types distinguished by relatively small size. There is little evident need for the Startup Village concept to specifically define a village in terms of geographical or demographic characteristics. Rather, the term 'village' describes **a scale for action that can be recognised at a local level**.

As a scale for action, villages need **place-based approaches**. Action here can be understood in two ways. First, there is the collective action of the village. This involves identifying local challenges, needs, and priorities, then pursuing solutions. Second is the action of a startup in the village. Crucially, implementing the Startup Village concept within a place-based approach requires **aligning local goals with startup activities**. This means that innovation and entrepreneurship should contribute towards purposes that are locally meaningful, whether that is the provision of quality jobs or improvements in well-being. This point is especially important since the small village scale increases the proportional impact of a single business, magnifying the differential effects of productive and destructive entrepreneurship. Fostering the 'embeddedness' of startups in place has a role here (McKeever et al. 2015), not least because incubating startups in villages will provide little local value if successful firms promptly relocate up the urban hierarchy.

The village scale does have drawbacks beyond size, however. A village is not automatically a 'community' with shared values (Gaddefors & Anderson 2019), and care should be taken not to apply a rosy lens to setting objectives. Some villages may have conservative cultures that mitigate against entrepreneurship (Beckmann et al. 2021). Similarly, embeddedness can lead to lock-in, reproducing existing ideas rather than exploiting new opportunities (Hunt et al. 2021). A critical implication for the Startup Village concept is that **not all villages are likely to need, want, or be able to support innovation and entrepreneurship initiatives**.

To function successfully as a scale for place-based action, a potential Startup Village will need **two forms of recognised coherence**: material and imagined (Jones & Woods 2013). Material coherence refers to institutions and physical structures, like a parish council, village hall, or school. As well as physically identifying a village,

these elements embed governance and provide a basic infrastructure for local action. Imagined coherence refers to the sense of identity residents feel for the village and share with each other. This can include feelings of belonging, expressions of village pride, and participation in local events. In some areas, rebuilding local communities requires pacts between old and new residents and between different generations (Teti 2022). Imagined coherence encourages local action by bringing people together and shaping shared interests. Villages that lack both forms of coherence (or strength in one) are unlikely to be suitable candidates for developing into a Startup Village. The question of which villages are Startup Villages will be returned to in Section 3 below.

Of course, village scale activities cannot succeed alone. Within the Startup Village concept, innovation and entrepreneurship need to be **place-based but not place-bound** (Kristensen & Dubois 2021). Because the village scale rarely provides the resources and markets that startups need to thrive, local and trans-local need to be combined for the 'best of both worlds' (Korsgaard et al. 2015b). 'Global pipelines' are as important as 'local buzz' to innovation. Rural areas need access to customers, partners, suppliers and competitors around the globe (Bathelt, Malmberg & Maskell 2004). The most innovative companies address the disadvantages associated with a peripheral location and a small local market by developing cooperative relationships with relevant global production networks within their industries (Fitjar & Rodríguez-Pose 2011). Similarly, governance linking institutions and support at multiple geographical levels has an enabling role to play for both businesses and rural development in general (Kujala et al. 2021). Hence, although the village is a key scale for action and objective-setting, supporting action can also occur at multiple spatial scales. The ecosystem building block, described in the following section, continues this point.

2.5. Ecosystems

Ecosystems provide a fifth building block that brings together innovation and entrepreneurship in rural space at village scale. Within the Startup Village concept, the ecosystems building block includes:

- **The incorporation of multiple interdependent actors and facilitating factors**
- **A bridge between innovation and entrepreneurship**
- **A tailored approach to rural space and scale**
- **Multi-scalar design and management**

Ecosystems apply an ecological metaphor to understanding innovation and entrepreneurship from a systems perspective. In short, ecosystems describe **multiple interdependent actors and facilitating factors** (Stam & van de Ven 2021), which are **dynamically organised through particular contexts, configurations, and collaborations** (Scaringella & Radziwon 2018). There are different types of ecosystems in the literature (Scaringella & Radziwon 2018), but these distinctions are less important to the Startup Village concept than their commonalities. In the literature, these commonalities include the coexistence of collaboration and competition, knowledge circulation, spillover effects, and catalysing economic outcomes (Scaringella & Radziwon 2018). Ecosystems also help to shed light on how combinations of characteristics interact to produce different effects in different sectors and contexts. For example, broadband access has a stronger enabling effect for entrepreneurship in more attractive rural areas, and in knowledge intensive and creative industries (Duvivier et al. 2021).

Ecosystems consequently **bridge the innovation and entrepreneurship building blocks** (Schmutzler et al. 2020) in two ways. First, the ecosystem lens reiterates that innovation is not created by a 'lone inventor', but happens in systems, which are interactive, territorial, embedded in socio-cultural settings (Asheim et al. 2019) and include different typologies of actors. Interdependencies and divisions of specialist tasks and value chain activities mean that few single firms achieve value creation independently (Adner 2006). In particular, new and small entrepreneurial ventures use intermediaries to tap into new knowledge, find customers and partners and reduce the risks and uncertainties associated to international markets. Examples of such intermediaries include subsidiaries of multinational firms, local and foreign export intermediaries (Terjesen et al. 2010). Well-functioning innovation systems provide **the conditions to nurture, develop, and scale ideas**. The exchange of knowledge facilitates co-evolution processes.

Second, by incorporating actors, relationships, and networks, ecosystems provide a fertile **ground for enabling entrepreneurship** (Stam & van de Ven 2021). An entrepreneur within an ecosystem, for example, is better able to spy opportunities, transfer skills and access knowledge and support than an entrepreneur alone. The performance of an entrepreneurial firm and its ability to generate returns depends, in part, on the characteristics

of the enabling business environment and the costs of experimentation (Grover et al. 2022). These enabling conditions are considered further in Section 3 below.

Typically, systems for innovation and entrepreneurship are territorial (Asheim et al. 2019) – that is, based in a proximate area where face-to-face relationships can be established and knowledge exchanged. Italy's industrial districts (Becattini 1989) are a classic example. This territorial dimension makes it possible for ecosystems to also **bridge the rural space and village scale**. Doing so introduces both an opportunity and a challenge for the Startup Village concept, however. On one hand, an ecosystem approach evokes the 'embeddedness' often discussed in the rural entrepreneurship literature, in which place and local relationships are core values. On the other hand, ecosystems often hinge on proximity, agglomeration, and related diversity (different businesses doing related things). This poses clear difficulties for remote rural areas and at the village scale. Simply shrinking an ecosystem is unlikely to be sufficient, and strategies to 'borrow size' (Meijers & van der Wouw 2019) are necessary.

Networks that encompass and transcend place are considered essential for successful rural entrepreneurship (Beckmann et al. 2021, Kristensen & Dubois 2021, Tuitjer & Küpper 2020, Korsgaard et al. 2015b), and rural development more broadly (Shucksmith 2012). One way to explore networks for rural space and village scale is through the 'new localities' approach (Jones & Woods 2013), which details **three inter-connected scales**: 1) the village; 2) networks and resources within the surrounding region; and, 3) relationships that are 'near' through other forms of connectivity. For example, an entrepreneur may be 1) embedded in a local business community, 2) supported through a regional accelerator, and 3) connected to a key export market. This approach reflects research on proximity, which shows that **'nearness' is not limited to physical space** (Ferru & Rallet 2018). Proximity can be geographical, but also cognitive, social, institutional, or organisational (Boschma 2005). It is believed that knowledge exchanges, learning and innovation can be activated at a distance. Rural actors establish connections with economic agents not only in their geographical proximity but also over longer distances and even small firms have the capacity to engage in "multiple webs of distant relations" (Dubois, 2016: 10).

As this suggests, the Startup Village concept envisages ecosystems somewhat differently. At a local level, Startup Village ecosystems will need to **incorporate businesses and stakeholders that typical entrepreneurial/business ecosystem approaches might overlook**, such as small shops and community groups. Doing so recognises their important contribution to the vitality and attractiveness of villages, and their potential for skill-sharing and mutual support. At a trans-local level, Startup Village ecosystems require reworking territorial approaches.

Start-up villages need more **conscious approaches to ecosystem design and relationship management** – the ecological metaphor does not mean that ecosystems will form and grow without such attention. Both points suggest flipping the conventional wisdom that innovation and entrepreneurship arise from an existing ecosystem and instead viewing an incipient ecosystem as a means through which innovation and entrepreneurship can be fostered for rural space and at a village scale. The following sections consider some of the ways in which this might be practically achieved.

2.6. Section summary

This section has identified the five key building blocks for the Startup Village concept: innovation, entrepreneurship, rural space, village scale, and ecosystems. Each building block has an existing literature. Crucially, the Startup Village concept requires considering how the building blocks *interact*. The ecosystem building block has an important role as a unifying 'glue'. Throughout the discussion in this section, the following propositions for the Startup Village concept have emerged:

1. **Startups refer to a specific category of innovation and entrepreneurship. The Startup Village concept is not concerned with generic business support for any and all rural businesses, but specifically aims to unlock the potential of 'ambitious entrepreneurship'.**
2. **Unlike conventional approaches to promoting high growth firms, however, the Startup Village concept does not seek 'growth at any cost'. Rather, the village as a scale for action should set place-based objectives for innovation and entrepreneurship.**

3. **Not all villages will wish to support or be capable of supporting startups. Hence just as the Startup Village concept does not apply to all rural businesses, it will not describe all villages.**
4. **Equally, care must be taken to ensure that the Startup Village concept is as inclusive as possible, so that it does not simply reproduce existing patterns of economic 'success' and urban proximity.**
5. **Place-based does not mean place-bound and successful Startup Villages will need to mobilise multi-scalar connectivity through ecosystems.**

3. How can Startup Villages be enabled?

The previous section introduced the five key building blocks in the Startup Village concept. This next section moves from theory to practice, by taking up the question of how Startup Villages can be enabled in real villages. The section first considers which villages are likely to succeed as Startup Villages, offering a preliminary baseline and readiness level framework. The ecosystems approach is then elaborated, with an assessment tool adapted for rural areas. Finally, the section highlights the importance of design and management for successfully combining locality with connectivity.

3.1. Which villages are Startup Villages?

As discussed above, villages are not a homogenous category. There are differences based on villages' specific location and resources as well as diversities in terms of opportunities and challenges. Accordingly, there is no single model for a Startup Village that can – or should – apply everywhere. **Rural development must be cultivated, not dictated**. Rural areas can have strong identities and place attachments, and there are valid concerns about unwanted or insensitive development, and local people becoming priced out of housing markets (Willett 2021). In some areas, innovation and growth objectives may simply not be a priority (Heley et al. 2012).

It is reasonable and necessary to assume that not every village can be or will want to be home to startups, yet the inclusive ambitions in the Long-term Vision will not be achieved by making places that are already successful more so. There are also many examples of poorly conceived enterprise schemes that have failed to create results for local development (Jones 2019). Putting the Startup Village concept into practice requires **targeting efforts and resources effectively and pragmatically**. Section 2.4 introduced material and imagined coherence as a way to identify a 'workable' village scale. This provides a preliminary baseline, as shown in the table below.

Table 2. Material and imagined coherence.

Coherence	Baseline requirements	Unsuitable examples
Material	The village is physically recognisable as a scale for action. There is basic infrastructure ('hardware') such as internet access, some local services, and community meeting places. There are also local institutions ('orgware'), such as a local municipal council or community group.	- Lacking or very low quality infrastructure and services. - A tiny or dispersed settlement with only housing. - No localised or locally engaged institutions. - All material coherence provided by a neighbouring settlement.
Imagined	The village has a 'sense of place' that old and new residents recognise and help develop ('software'). There are local events or groups that bring people together. There is interest in shared action to tackle local challenges.	- Residents primarily identify with a neighbouring settlement. - Minimal collective engagement and lack of interest and weak institutional capacity. - The local identity is not open to innovation and/or resists change.

As this table suggests, not all rural areas can draw upon a baseline of endogenous capabilities (Bock 2016). A **combination of commitment, capacities and local circumstances** will determine which villages are able to foster innovation and entrepreneurship and influence the ways in which they do so. Of course, while some villages will remain unsuitable, capacity can be built in others. Weak structural conditions can be compensated for by the inflow of external knowledge and policy support (Baumgartinger-Seiringer et al. 2022)

One way to incorporate villages across the developmental spectrum is by assessing readiness levels. Readiness level scales are widely used to describe the relative maturity of an innovation and enable comparison across

considerable diversity. Early levels typically represent research, middle levels development, and later levels deployment or implementation. Variants include Technology Readiness Levels (TRLs), which measure the maturity of a technology, and Societal Readiness Levels (SRLs), which describe the social acceptance of an innovation.

Applying the readiness level principle to Startup Villages helps distinguish three broad village categories, according to stage: envisioning, experimenting, and demonstrating. (A local will to innovate and support entrepreneurship is a precondition for all stages.)

Figure 2. Startup Village readiness levels.

Villages in the **envisioning stage** begin with an interest in exploring opportunities for innovation. They may, however, lack capacities in terms of people, place, and resources. These villages will hence be working to identify the forms of local action and multi-level support needed to build their capacities and improve their integration into an ecosystem.

Villages in the **experimenting stage** will have sufficient baseline capacities, although will likely still be building some capacities. They will be implementing actions to support innovation and entrepreneurship within an existing ecosystem. These villages are likely to have at least one startup in incubation.

Villages in the **demonstrating stage** will have relatively well-developed capacities, ecosystems, and support structures. They will have active startups that have achieved demonstrable results. These villages can provide practical, inspiring examples that contribute to shared learning.

The readiness level approach offers scope for **learning *between* villages**, which can be developed at a regional scale. For example, within a region a village at the experimenting or demonstrating stage can serve as a 'leader' node for a network of villages at the prior stage. Although action and objectives should still be place-based, a village network can function as a **community of practice**, for sharing methods, experiences, and practical examples. Section 4 further discusses how the readiness levels can be used during the Startup Village Forum. The next sub-section details the specific capacities and enabling factors required to progress through the levels, from an ecosystem perspective.

3.2. Enabling ecosystems for Startup Villages

The interactions between building blocks make identifying and understanding practical enabling factors complex. As ever, there is no one-size-fits-all model, and 'what works' in one context may have different effects in another. Operationalising the ecosystem building block can help overcome some of these difficulties by revealing the multiple moving parts at play.

Section 2.5 argued that an ecosystem approach needs to be adapted for rural space and village scale, specifically to overcome the limitations of simply downscaling conventional models. This can be achieved by **combining insights from the ecosystems literature with contemporary approaches to rural**

development. In ecosystems research, Stam (2015, Stam & van de Ven 2021, Miles & Morrison 2020) has identified ten key elements for an entrepreneurial ecosystem, reflecting a set of resource endowments and a set of institutional arrangements. These are adapted in the table below to highlight key questions for Startup Villages to address.

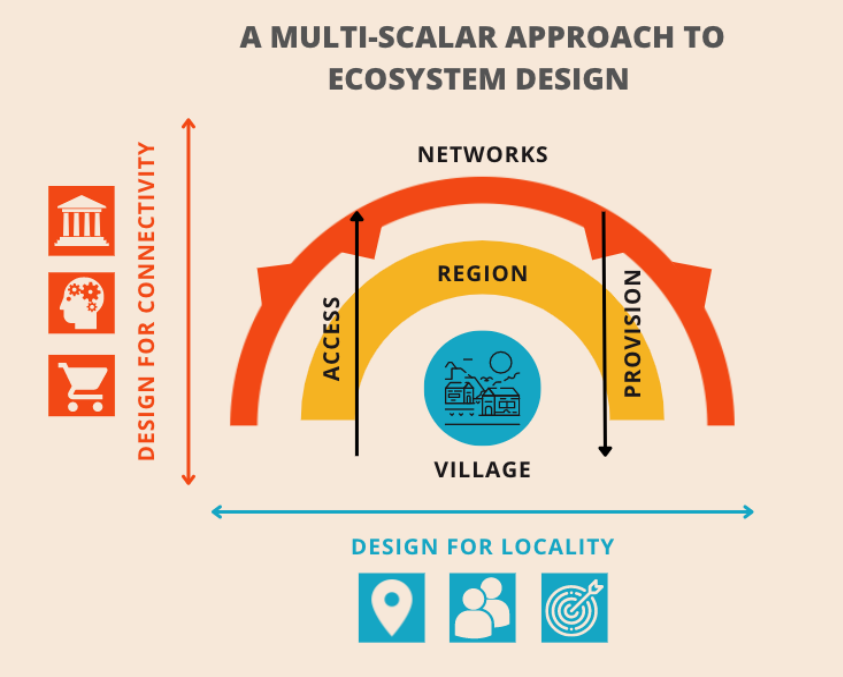
Table 3. Enabling elements for Startup Villages.

Element		Key questions for Startup Villages
Institutions	Formal institutions	Does the village have access to institutional support for innovation and entrepreneurship? Are the administrative, legislative and regulatory frameworks supportive for innovation and startup creation?
	Informal institutions	Does the village have a supportive informal institutions and culture for innovation and entrepreneurship? Does the village have established local knowledge networks? Are there opportunities to build extra-local networks? Is there a community of innovators?
Resources	Physical resources	Does the village have an appropriate infrastructure for business (e.g. incubators, co-working spaces)? Is the village an attractive place to live and work? Can local resources help create new opportunities?
	Financial resources	Will entrepreneurs in the village have access to finance? Can the village access the financial resources to provide business support or improve infrastructures?
	Leadership	Does the village have leadership structures that are willing/able to support innovation and provide momentum? Do local entrepreneurs have role models?
	Human capital	Does the village have existing talent, or could it attract talent? Do residents have entrepreneurial skills, knowledge, and experience? Can potential innovators access appropriate training?
	Knowledge	Can the village access and broker knowledge from local and external networks and organisations (e,g. higher education and research organisations, technology transfer centres and service providers) ? Does the village have existing businesses that are willing/able to share knowledge?
	Demand	Will entrepreneurs in the village be able to access demand in external markets? If there are potential barriers, can these be reasonably overcome, and will there be support for doing so?
	Intermediate services	Are there business services (such as postal facilities) in the village, or nearby? Will entrepreneurs in the village be able to access legal and financial services?

These nine elements can be used to build from the baseline into an initial inventory, beginning at the village scale. However, the elements are unlikely to reveal a holistic ecosystem at village scale. This is where rural development research helps. Contemporary perspectives on rural development advocate **balancing endogenous forces with exogenous resources** (Bock 2016, Gkartzios & Lowe 2019, Goodwin-Hawkins et al. 2022). Forms of 'networked development' (Shucksmith 2012) are crucial for harnessing local value through trans-local relations, markets, institutions, and governance. Digital and personnel connections to global knowledge, networks and markets make rural areas more competitive. As suggested by Rosenfeld and Wojan (2016: 130): "the more isolated the community, the greater the need to develop and maintain external business, professional and collegial relationships through associational memberships, personnel/student exchanges, trade shows and market tours".

Linking networked development to the three spatial lenses noted in Section 2.5 provides a multi-scalar view of ecosystem design. As shown in the figure below, this bridges activities in the locality (the horizontal axis) with trans-local connectivity (the vertical axis).

Figure 3. A multi-scalar approach to ecosystem design.



This approach continues to centre the village as a scale for action, through the core values of **place, people, and purpose**. Equally, building connectivity through **governance, networks, and markets** provides routes for strengthening the nine ecosystem elements beyond place.

Distinguishing between access and provision is helpful here (Goodwin-Hawkins et al. 2022). Provision refers to what is physically available in the village or local area. Several ecosystem elements, such as financial resources, require exogenous contribution to local provision. For example, a village needing improved internet infrastructure might not achieve this without external investment and know-how. Access, on the other hand, refers to the ability of people in the village to render ecosystem elements 'within reach'. For example, in a village without a bank branch, businesses may access financial services online instead. Of course, to assume remote access is insufficient: villages in the 'envisioning' stage should especially evaluate existing access against anticipated business needs.

Separating access and provision, combined with locality and connectivity, suggests multiple potential strategies for strengthening ecosystems. These are summarised in the matrix below. No single strategy suffices, and **a combination of strategies is required**. For villages in the 'experimenting' stage, testing activities and monitoring how these work in practice will be particularly important.

Table 4. Access and provision.

	Provision	Access
Locality	**Strategy: Identify, strengthen, and utilise existing institutions and resources.**	**Strategy: Local action to identify access needs and improve uptake.**
	Examples: Converting a village hall to a hub; multi-purposing existing shops or services; sharing local skills.	Examples: Surveying local businesses; providing digital training; exchanging knowledge about accessible resources.
Connectivity	**Strategy: Tap exogenous networks and resources to invest in local provision.**	**Strategy: Explore access solutions and mobilise networks to improve supply.**
	Examples: Apply for funding; lobby local or national government; liaise with a service provider organisation.	Examples: Research online services; purchase group subscriptions; establish trusted partnerships.

This section has so far treated 'the village' as a generic scale for action. But the strategies above raise obvious questions about who undertakes action for whom. The next sub-section picks up these questions and takes a closer look at particular actors and stakeholders.

3.3. Strategic management and capacity building

The multi-scalar approach outlined in Section 3.2 above indicates the vital role of **intentional design, strategic management, and capacity building over time**. Startup Villages clearly require **multiple actors** to work together. The quadruple helix (Arnkil et al. 2010, Cavallini et al. 2016) identifies the key groups: 1) governance, 2) research, 3) enterprise, and 4) the public, or civil society.

For Startup Villages, **the public** is anchored at the local scale – ultimately, these are the people who live in the place for which innovation and entrepreneurship need to work purposefully. The local public hence has a participatory role in defining place-based objectives alongside a cultural role in contributing to an environment that is open to change. In some villages, community members may take a leadership role in promoting startup development, but this will depend upon skills and capacities, and necessitate active engagement with enterprise and governance. Although a wider public is clearly implied in markets; mere product and service users are less likely to be directly involved in place-based activities.

Enterprise is similarly local, first in the form of embedded entrepreneurs and emerging startups, and second as surrounding local businesses that provide intermediate services, soft support, and an entrepreneurial culture. In some villages, local businesses may lead in promoting startup development, depending on relationships and capacities. Equally, the ecosystem approach means that enterprise has a multi-scalar role in realising Startup Village development, through networks, services, and supply chains. To some extent, these enterprises beyond the area will participate indirectly. However, there could be valuable roles for key enterprise stakeholders – such as financial services or internet providers – to become more actively engaged, including through the Startup Village Forum.

Governance also needs a local presence but should be vertically networked. The role of institutions and resources means that Startup Villages will require effective networked governance. In some villages, local government (such as a municipal council) may drive initiatives forward. It will require positive support from higher levels, including to build its own capacities. In other villages, momentum may come from regional government initiatives. This provides strategic advantages but still depends on active local engagement to integrate place-based objectives and avoid becoming top-down. In turn, many regional governments will depend upon supportive national policies.

Except in villages within functional urban areas, university research is unlikely to be directly local but regional universities can play important roles in their wider area (Charles et al. 2021, OECD 2020b). These roles are often thought of in terms of technology transfer and new knowledge and expertise that can be directly utilised

in innovation. As well as being knowledge providers, however, researchers can also participate as knowledge brokers in collective learning processes (Ingram et al. 2018). This might include, for example, helping to frame challenges and opportunities, seeking and sharing information, evaluating implementation, and facilitating reflection. Both roles require mutual engagement between researchers and stakeholders, which may occur at a local level or via the Startup Village Forum.

Startup Villages will need leadership so that resources and institutions can be **managed over a longer term**. Further, capacity building is essential for progressing Startup Villages from the envisioning stage and ensuring that existing spatial patterns of success are not simply reproduced. **Business capacity building and institutional or leadership capacity building** are distinct, however.

Business capacity building concerns, first, the capacity of entrepreneurs to start a business, innovate and realise ambitions; and second, the capacity of other local businesses to contribute to a supportive ecosystem. There are many established options for targeting support to the first group, and assessing the provision of and access to these types of initiatives against need is an essential early step. Although the second group is not a direct target of the Startup Village concept, they should not be neglected. Looking laterally across the locality, other businesses can be important sources of social networks, knowledge, and intermediate services and contribute to a thriving ecosystem. Some local businesses, such as accountants or couriers, may need to co-evolve alongside growing startups, increasing their own skills and capacities as intermediate service providers. Others potentially represent latent resources. For example, while research suggests thar rural 'lifestyle entrepreneurs' typically lack growth ambitions (Stockdale 2006, Stone & Stubbs 2007), lifestyle entrepreneurs who move to rural areas often bring enhanced experiences, networks, and perspectives (Baumgartner et al. 2013), which could be shared. Different forms of business capacity building are summarised in the table below.

Table 5. Forms of business capacity building.

Targeted	Co-evolving	Lateral
Initiatives and resources that provide targeted support to startups and emerging ambitious entrepreneurs. Examples: business grants, training, incubator and accelerator programmes.	Activities that assist local businesses in the ecosystem (e.g., intermediate service providers) to co-evolve. Examples: professional development, business networks, secondment.	Methods for integrating transferable knowledge and latent resources from among other local businesses. Examples: skill sharing, mentoring, informal networks, pledges.

At a village scale, building business capacity may require institutions to grow capacities. **Institutional capacity building** concerns improving the ability of local governance and institutional stakeholders to provide leadership, think strategically, take practical action, and accomplish goals. The capacity to evaluate outcomes, reflect on learning, and iterate action is also valuable, particularly for villages at the experimenting stage. Institutional capacities can be analysed and built in three ways (Healey et al. 2003), as summarised in the table below.

Table 6. Forms of institutional capacity building.

Knowledge capacities	Relational capacities	Mobilisation capacities
Activities and resources to strengthen local knowledge and access to expertise. *Examples: training, expertise directories, information packs.*	Methods for building trust and exchange through multi-level interaction. *Examples: knowledge exchange fora, study visits, secondment, mentoring.*	Tools and resources for enhancing the capacity of local institutions to act. *Examples: challenge funds, project management, practice guidelines.*

All three capacities are necessary. Further, **institutional capacities need to be appropriately matched with development strategies** (Rodríguez-Pose 2013). This is a potential challenge for Startup Villages, which may have institutions that are small-scale, voluntary, and resource-constrained (Bock 2016). Solutions are likely to lie in supportive vertical governance and connectivity, both in improving the capacities available locally and accessing external sources of support and expertise.

Capacity over time is also important, and easy to overlook. The approach to ecosystem building outlined in Section 3.2 above requires management – lasting results will not be achieved through a one-off event, small grant, or new facility, for example. Although 'triggers' for change can be useful, a single initiative cannot sustain momentum by itself. **Reflection and re-assessment** are hence as much a part of strategy as setting aims and objectives. One challenge for the Startup Village Forum – to which the next section turns – will be to ensure that effective management is showcased alongside new implementation.

3.4. Section summary

This section has considered the hard and soft enabling factors required to translate the Startup Village concept from theory to practice. Because real Startup Villages will be place-based, it is not possible to provide a standard 'recipe' for results. More so, the interactions between building blocks that are crucial to the Startup Village concept require more investigation. However, this section has begun to elaborate a multi-scalar perspective that remains place-based without becoming place-bound. The section has presented a range of frameworks and considerations that lead to the following points:

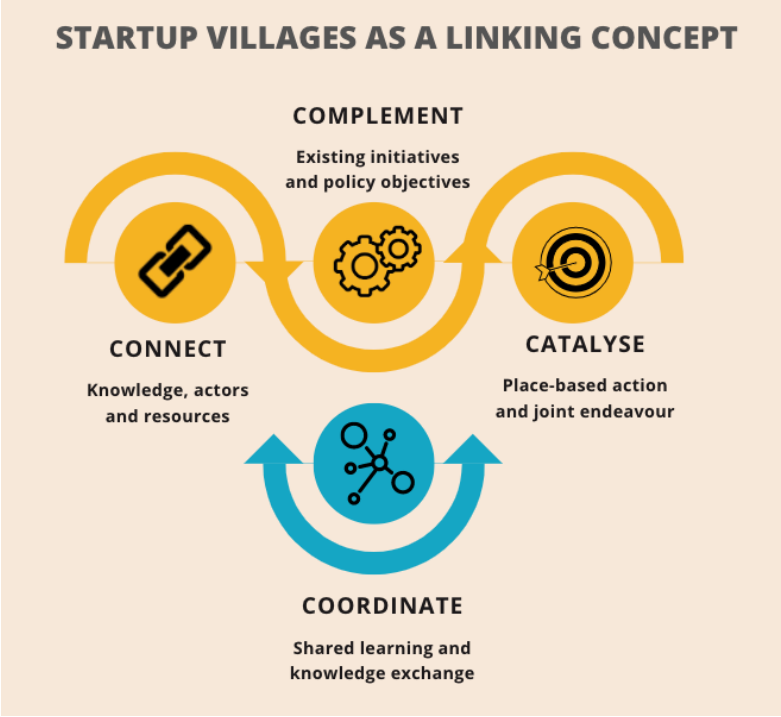
1. **A potential Startup Village requires a baseline of material infrastructure and institutions, and soft 'sense of place'.**
2. **These villages should begin with an envisioning stage, which explores objectives, identifies capacities, and inventories the necessary institutions and resources that can be provided or accessed.**
3. **Improving ecosystem integration to support innovation and entrepreneurship is inherently experimental. Just as not all startups will succeed, nor will all local initiatives.**
4. **Villages that have achieved startup success can helpfully demonstrate their learning. They should not be seen as replicable models but can share practical advice.**
5. **Although Startup Villages are always place-based, effective ecosystems need to be multi-scalar, bridging locality (place, people, purpose) with connectivity (governance, knowledge, markets).**
6. **The quadruple helix (governance, enterprise, research, and civil society) complements this approach and points to the need to facilitate interaction and build capacity.**
7. **Capacity building needs to consider both enterprises and institutions. This in turn requires strategic integration and management over time.**

4. How should the Startup Village Forum operate?

Because Startup Villages are not a standalone initiative, it is important to consider how the concept can be used to link existing action and promote shared endeavour. This section outlines how Startup Villages can be used as a **linking concept**, with specific reference to the role of the Startup Village Forum.

The linking potential of the Startup Village concept can be mobilised in policy and practice in three ways: to **connect knowledge, actors, and resources** across the quadruple helix; to **complement existing initiatives and policy objectives** at multiple levels of governance; and, to **catalyse place-based action and joint endeavour** for stronger rural areas. These are shown below.

Figure 4. Startup Villages as a linking concept.



The fourth 'C' – **coordinating shared learning and knowledge exchange** – describes the key role for the Startup Village Forum. This coordination role reflects the other three functions. That is, as an annual event, the Forum should provide a valuable space to facilitate trans-local connections, join up complementary initiatives, and valorise rural innovation and entrepreneurship.

The Startup Village Forum should not direct or define action but **inform possibilities through structured exchange**. To function effectively in this role, each annual meeting should include **representation from across the quadruple helix**, with programming that facilitates interaction and dialogue. In this way, presenters and participants can form a time-bound community of practice (Wenger 1998), brought together by shared interests, and exchanging expertise to enable collective learning.

As a European forum, it also provides opportunities to bring together transnational actors who may not ordinarily interact. This enables the Startup Village Forum to **extend the connectivity** of ecosystem design by providing a space for new networks, relationships, and exchanges. While serendipitous connections will certainly occur, Forum meetings will need to be intentionally **designed to facilitate those connections that add value** – and ensure participants are motivated to return in future.

The most useful forms of programme for the Startup Village Forum should emerge over time through successive participant feedback, and as policy and practice develop around the concept. Early meetings, however, could begin by aiming to fill some **knowledge exchange needs** identified in this report, potentially through an annual theme. The table below concludes by collating these needs, drawn from policy and practice, research and evidence.

Table 7. Knowledge exchange needs for the Startup Village Forum.

Knowledge exchange needs for the Startup Village Forum	
Research evidence	Understanding the interactions between innovation and entrepreneurship in rural space and at village scale is crucial for advancing the Startup Village concept. Research on innovation ecosystems is still developing and requires validation in rural cases. Additional efforts are also needed on how to better measure innovation in rural areas. The Startup Village Forum should **call for and profile research that responds to these evidence needs**. Participants from research should be encouraged to engage with other participants to gain improved knowledge of opportunities and challenges in policy and practice. A written report from each annual Forum should identify the key **questions raised for future research**.
Policy and practice	Policy interest in innovation, entrepreneurship, and rural development are well-established, but are not necessarily brought together. Initiatives at different levels and from different regions offer potential opportunities for policy learning, and to catalyse joint endeavour. Effective 'rural proofing' for policy remains an area for development. The Startup Village Forum should **incorporate policy expertise across domains and regions**. Policy participants should be encouraged to reflect on both 'what works' and what poses practical challenges. The Forum should provide information on ongoing key EU-level initiatives.
Enterprise	Busting the myths about rural enterprise requires showcasing success. Just as rural entrepreneurs can lack local role models, urban-based policymakers may have little contact with innovative rural businesses. Designing and managing village-scale integration in ecosystems particularly requires a strong understanding of what businesses need and how connectivity can be built. The Startup Village Forum should **valorise rural innovation and entrepreneurship through successful examples**. Although there may be possibilities for the Forum to facilitate forms of business and investor match-making, this will heavily depend on take-up. Early meetings may do better to focus on spreading the Startup Village concept and supporting place-based leadership. The potential role of intermediary organisations should be explored.
Demonstration villages	Villages at the demonstrating stage will have relatively well-developed capacities and be integrated in ecosystems. They will have active startups that have achieved (or are achieving) ambitious results. Although these villages are not replicable models, profiling them can help to celebrate success and share learning. The Startup Village Forum should **call for and profile villages that can demonstrate success**. Village participants should be encouraged to reflect on their experiences and highlight their 'how' processes. Care should be taken to **include a diverse range of demonstration villages** – not just those that are affluent or within functional urban areas.

Methods and tools for locality	Key areas for furthering knowledge about design for locality include validating the baseline capacities for Startup Villages, assessment tools for the envisioning stage, strategies for experimentation, and participatory methods for developing place-based objectives. The Startup Village Forum should **highlight methods and tools** that have been tested in practice. This will involve ensuring an appropriate audience for cascading information to relevant stakeholders. These discussions can also help to refine the Startup Village concept in both theory and practice.
Options and approaches for connectivity	Key areas for furthering knowledge about design for connectivity include how networks and markets can be effectively accessed and exploited, which ecosystem elements should be provided locally and which can be accessed trans-locally or vertically, how these differ by sector or business type, and low-resource strategies for enhancing connectivity. The Startup Village Forum should **highlight strategies for connectivity and learning from experience**. Again, these discussions can help to refine the Startup Village concept in theory and practice.

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List of figures

List of tables

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