

Working Document

Revitalising rural areas through digitisation

The experience of three rural digital hubs



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Abstract

This case study draws **practical lessons from rural digital hub examples from all over Europe**: the Ludgate Hub in Ireland, #hellodigital in Scotland and Cocotte Numerique in France* to answer practical questions such as: 'What are rural digital hubs?'; 'How can they improve digitisation in rural areas?'; and 'What are the practical steps for setting up and running a digital hub?'

Rural digital hubs are efficient tools for **overcoming the double digital divide** in rural areas: they can contribute to both improving fast and superfast broadband connectivity in rural areas and improve digital opportunities and skills of both rural businesses and the wider rural community.

However, their practical implementation raises **specific challenges**, including estimating and identifying relevant financial and human resources for setting up the hub, engaging the local community and attracting businesses (so that digital hubs do not remain empty buildings with good broadband connection), and providing the right services that respond to local needs.

* See detailed description of the three case examples. Special thanks to Thematic Group members Grainne Dwyer (the Ludgate Hub), Rob Clarke (#hellodigital) and Clive Peckham & Corinne Ibarra (Cocotte Numerique) for their support.



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1. What is a 'rural digital hub'?

Rural digital hubs offer physical spaces with fast, reliable internet access that provide a whole range of business and community support services in rural areas. The activities offered by digital hubs depend on whether their target is businesses, the community or both¹, and whether they provide space or also specific services to their target groups. Most digital hubs cannot be categorised within a single category of activity, but carry out a combination of these.

	Focus on businesses	Focus on community
Provides space	Office and co-working space, meeting rooms, training space, video conferencing facilities	Basic services (crèche, library, etc.)
Provides services	Networking & peer-to-peer activities, training, mentoring and business advisory, e-commerce	Improving digital literacy, training classes

2. The three case examples in a nutshell

This case study is based on three specific rural digital hub examples (see also detailed case examples) of Ludgate Hub (Ireland), #hellodigital (Scotland) and Cocotte Numerique (France). While a number of common characteristics and lessons can be drawn the three examples also represent very different models:

	Vision / aim	Target	Scope	Investment	Broadband
Ludgate Hub	Attracting high-profile (digital) businesses, creating large-scale employment, rebranding the <i>town of Skibbereen</i>	High-scale digital and other kinds of businesses Local community	Local (town Skibbereen)	Large-scale private investment to set up a digital hub & broadband	Created next generation (1GB) broadband connection

¹ See EU Rural Review 24 on categories of rural digital hubs.



	Vision / aim	Target	Scope	Investment	Broadband
Cocotte Numerique	Setting up a public service hub at <i>local level</i>	Businesses and local community	Regional (Auvergne region)	Public investment: several phases/ various different sources	Evolving from 2-4 mbps ADSL (2005) to 100mbps fibre fast broadband (2016) – independently from project
#hellodigital	Digital demonstration centre; Technology as catalyst and enabler for businesses <i>across the region</i>	Primarily businesses	Across the region (Highlands and Islands)	Public investment	Provided by separate programme on rolling out fibre broadband in Scotland

The Ludgate Hub in Skibbereen (Ireland)

Launched in 2015 and located in Skibbereen, a rural town on the South-West coast of Ireland, the project settled in an old unoccupied bakery building. The project was initiated by a group of 11 people (the Ludgate Board) that recognised that by bridging Skibbereen’s digital divide they would unlock its huge potential. The Ludgate Hub has ambitious goals, ultimately resulting in a return of the diaspora, creating an ecosystem of creativity and innovation, and progressing of job growth via digital technology. The long-term vision is to make Skibbereen a hotspot for technology start-ups and multinationals.

The Cocotte Numerique (France)

Cocotte started in 2005 when the public service hub was set up, including a multi-media room, internet access, digital education and training. From 2005 to 2015 the hub expanded its services becoming a distance-working centre, organising training/coaching for ‘independent digital workers’ and younger people, creating a web site that attracted workers from outside the region and implementing a new ‘welcoming’ strategy to assist new inhabitants and their families to settle in the area (including rent and income support).

#Hellodigital in Inverness (Scotland)

#hellodigital, hosted by Highlands and Islands Enterprise, connects business and technology, with the goal that every business makes the most of the opportunities coming from digital technology and fibre broadband availability. #hellodigital offers a diverse range of showcases, master classes and events, bringing together industry experts, academic leaders, and the business community. The hub helps businesses to explore the use of digital technology, share experiences, understand emerging trends and discover new business possibilities.

3. How can rural digital hubs help improving rural areas?

The **digital divide** between urban and rural areas is one of the main challenges that rural areas are facing today. This does not only mean the lack of appropriate fast and superfast (‘next generation’) broadband connection, but also the lack of appropriate digital skills to use digitisation opportunities. Rural digital hubs can bring a number of specific benefits in boosting the local economy and improving digitisation potential. The main added values of rural digital hubs for rural areas are presented below.



- ✓ In certain cases improve broadband connection is a direct consequence of implementing the hub project.

As a direct consequence of the Ludgate Hub a 1GB connection was set up in the town.

- The Ludgate Hub attracted 15 new members to permanently move to West Cork with their families; enabled 11 rural retailers to trade online; employed over 11 people over the year; 25 co-working companies were engaged per year.
- As a consequence of the Cocotte Numerique project on average 5 new entrepreneurs (and their families) settled in the area each year (total of 43 entrepreneurs and 98 family members).

- ✓ Attract new businesses and create new employment.

- ✓ Improve digital skills and capacity of rural businesses.

- The Ludgate Hub National Digital Week attracts 1600 attendees every year.
- The #hellodigital organised 60 business events and 2 conferences attended by 2043 delegates.

- CoCotte Numerique attracted a total of 98 new residents to the area.
- The Ludgate Hub attracted 15 new Ludgate members and families to permanently move to West Cork and supported 2,800 bed nights in the local area due to Ludgate events and operations.

- ✓ Attract new residents and new visitors including families of entrepreneurs and young people, generating new income for the area and improving basic services.

- ✓ Improve digital literacy of the wider rural community.

- The Ludgate Hub delivered coding classes and digital innovation classes to 25 and 15 students respectively, iPad training for 45 people, supported 'coder dojo' club for 65 kids.
- Cocotte Numerique Service operates Education Centre (including access to computers and wifi, and a young people's corner).

- The Ludgate Hub attract more than 250 people to the hub / month and supported 15 community groups.

- ✓ Strengthen the local community and improve partnerships.

- ✓ Improve the image and identity in rural areas and strategic vision.

- The Ludgate Hub transformed the rural area making it more attractive to people and businesses, it formulated a digital strategy and created a vision for the new generations.
- Cocotte Numerique put a strong emphasis on territorial marketing; especially to show to young people that setting up businesses in rural areas is a viable alternative.



4. Setting up a rural digital hub

The main steps of setting up a rural digital hub are:

1. Securing the necessary **conditions** (broadband, building etc.)
2. A committed **initiator** and engaging the local community
3. Ensuring the necessary **financial, technical and human** resources

What conditions are needed to set up a rural digital hub?

Conditions that are necessary or beneficial for setting up a rural digital hub:

- ✓ Good broadband connection is necessary
- ✓ Appropriate building is necessary
- ✓ Attractiveness of the location and good geographical position & good local services (education, health, etc.) are important and beneficial.

a) Fast broadband connection

The **presence of high speed broadband** is a must to set up a digital hub and start providing digital services. Setting up fast or superfast broadband connection is often triggered by the process of setting up the rural digital hub. The connectivity may be ensured through the investment of private stakeholders (e.g. Ludgate Hub); national or regional public programmes and digital strategies (e.g. in Scotland and France) or community involvement (see case study on community broadband). As a ‘rule of thumb’ rural digital hubs that were studied have at least 100mbps connectivity available in the hub. However, the necessary broadband connection will depend on the specific circumstances of the local area and hub.

Technical / broadband requirements



- ✓ The Ludgate Hub was a pilot town for SIRO (a joint venture company of ESB and Vodafone) that installed for the first time in an Irish rural town **1GB of Internet connectivity** (allowing in some cases 1gbps connection) through fibre.
- ✓ Highlands and Islands head office has 1GB fibre broadband connection (provided by the government programme to roll out fibre broadband across Scotland) out of which **100mbps sub-network** has been made available to #hellodigital.
- ✓ The connectivity of Cocotte Numerique has gradually evolved from 2 to 4 mbps (ADSL) connection, through VDSL and VDSL connection, to setting up **fibre connection (100mpbs)** in 2007 (through regional public funding).

Gigabytes, megabytes explained...

Gigabit internet is the next generation of broadband internet service which is typically delivered over fibre optic lines (as opposed to ADSL or VDSL connection) and provides speeds of 1,000Mbps (megabyte per second), which is also referred to as ‘1 Gbps’ (gigabyte per second). This means that customers have an internet connection that is 100 times faster than today’s average broadband service. The quality of the connection will vary based on the simultaneous connections that a hub has at a time.



b) Appropriate building & equipment



Appropriate building and facilities

- ✓ For Ludgate Hub, board member John Field made the old Bakery Building available to the initiative.
- ✓ The #hellogitall building is shared between the University of the Highlands and Islands and Scotland's Rural College.
- ✓ Cocotte Numerique was set up in a municipal building.

An appropriate space and location that hosts the digital hub is a necessary (but not in itself sufficient²) condition for operating a rural digital hub. The building with the right location (e.g. easy accessibility) and features (e.g. sufficient space for offices, co-working and events) need to be identified. Appropriate space may be provided by universities, by private stakeholders or by public authorities/ municipalities, as the three cases demonstrate.

Digital hubs also require relevant equipment, including meeting room facilities (e.g. for web-meetings), desks, Ethernet ports, wifi-connection, firewall and security systems, backup battery and (in some cases) repeater systems (for mobile phone reception), servers, printers, computers/laptops (often not provided), etc.

c) Attractive location and good geographical position

One of the elements contributing to the success of digital hubs is their **attractive rural location and geographical position**. Furthermore, appropriate basic services³ are needed to ensure good living conditions (e.g. health care, education, transport, etc.). Digital hubs have the potential of attracting not only businesses and young people but also their families. Therefore, support structures need to be in place to make the area attractive for living.



Location

- ✓ Skibbereen (the location of the Ludgate Hub) is 100km away – in accessible distance – from the nearest urban centre (Cork City) and is characterised by rich natural resources (2km from the coastline) as well as good basic services.
- ✓ Cocotte Numerique was set up in Murat (administrative centre of the sub-region), with good local support (welcoming) services and training for new digital entrepreneurs and their families.

Who should be involved in setting up the hub?

The main **initiators and stakeholders**:

- ✓ Local public stakeholders and private stakeholders can both play an important role in initiating a rural digital hub. An important lesson is that there are always **experienced and committed organisation(s)** behind these initiatives, often represented in a board, steering group or association.
- ✓ **Community involvement** from the early stages is crucial for the success of rural digital hubs, to ensure that hubs are not just empty buildings with connectivity and facilities, but also at the heart of rural community engagement.

² It is important to note that community engagement and provision of services to businesses as well as to the members of the community are crucial functions of rural digital hubs (see under 'activities').

³ In some cases, e.g. in Cocotte Numerique, the hubs themselves contribute to improving local services (e.g. providing welcoming advice, including advice about local employment and housing to family members, etc.).



b) Committed initiators

In all three cases, a strong initiator organisation stood behind the rural digital hub initiative, often led by charismatic people. Setting up rural digital hubs requires strong local commitment (and considerable investment) and therefore, the commitment of local leaders or lead organisations is crucial for their success.

Community support

- ✓ The Ludgate Hub initiative has been developed by a steering group consisting of a group of local entrepreneurs, digital ambassadors and business owners of local enterprises. The board of 11 members and their expertise and international network was a crucial part of the project.
- ✓ Cocotte Numerique was initiated by the Association of Local Authorities and town/village councils of the Murat Sub-region. The region has delegated responsibility for economic development.
- ✓ #hellodigital was initiated by Highlands and Islands Enterprise (HIE). HIE has been offering digital engagement support since 2012. A multi-partner steering group was established to oversee the development of the digital centre including the Scottish Government; Skills Development Scotland; Scottish Enterprise and Scottish Development International.

b) Community support

The local community has a great importance when it comes to support an emerging hub in rural towns. This is particularly true when the hub has a wide social scope (e.g. operates as a community centre). Without the involvement of the community from the early stages and continuous animation, ownership and engagement of the community, digital hubs may remain just empty ‘ghost’ buildings.

Community support

- ✓ The Ludgate Hub engaged early on with the local citizens and organisations by hosting meetings for shaping the plan for the project.
- ✓ #hellodigital brings together industry experts, academic leaders and the business community.
- ✓ The Cocotte Numerique project involved elected local representatives, public officials local businesses and the local population. Public consultations and surveys were carried out.

What resources are needed for setting up the hub?

The main **resources** required for setting up a rural digital hub:

- ✓ Initial financial investment (in the case of the three examples between €470,000 and €1,7 million) to convert the building, buy and set-up equipment (furniture, technical equipment, etc.)
- ✓ Human resources: normally 1 to 2 full-time staff (including project management and technical skills), and advice from senior experts

a) Financial resources

Financial resources required for setting up the hub **vary widely**, and among others depend on the type of digital hub set up (e.g. equipment needed based on planned services), the state of facilities before setting up the rural digital hub, or the Member State and rural area in which the hub is being set up. For instance, while the Ludgate Hub needed complete transformation and refurbishment of the building (and old bakery), #hellodigital has benefited from being situated in a new multi-partner building with security, catering and reception services. Therefore, the budgets of the examples below are only indicative.



The examples show that **funding sources may also vary**, and can be provided through public funding (e.g. national and EU funding as in the case of #hellodigital or Cocotte Numerique) or may come from private investments and/or corporate sponsorship (as in the case of the Ludgate Hub).

	What for?	Funding	Source of funding
The Ludgate Hub	Setting up the hub: modification of the building to comply with fire and access regulation, furniture, internal IT networks and systems, display screens, common areas, decoration, video conferencing suite, operational costs including wages and servers.	€1,649,000	Private and corporate sponsorship
		€51,000	Local authority public grant
	Total funding:	€1.7 million	97% private & 3% public
Cocotte Numerique	Setting up the initial public service centre (2005)	€800,000	80% EAGGF Funding, 20% local co-finance
	Murat Telecentre	€50,000	Regional and local public funding
	Cocotte Numerique Co-working	€160,000	ERDF (€53,000), the remaining is national (FNADT) and regional public funding
	Cocotte Numerique Fablab (works and equipment)	€130,000	National funding (Green Growth and Positive Energy Fund) and regional funding (Auvergne).
	Total funding:	€1.14 million	100% public (including EU and national/regional)
#hellodigital	Setting up the hub (building and technology costs, plus project management and a programme of activity)	£306,000 (c. €388,500)	Public (government) fund: Digital Scotland Business Excellence Partnership (DSBEP)
	Develop a Digital Scotland Excellence Centre (additional business briefings and events)	£34,000 (c. €47,700)	HIE Strategic Development Body
	HIE grant after building delays.	£28,000 (c. €32,800)	HIE
	Total funding:	£ 368,000 (c. €469,000)	100% public (national/regional)

b) Human resources

Setting up the hubs typically required **1 to 2 full-time staff** primarily responsible for managing the project. Typical skills needed for setting up the hub include management skills, strategic planning, management of building and refurbishment, office design knowledge, marketing and PR, funding knowledge and financial management and business support knowledge.



Typical challenges of setting up the three hubs included:

- ✓ **Convince funders and other relevant stakeholders** about the added value of a digital hub in rural areas: #hellodigital found it challenging to convince funders about the added value of a digital centre in rural areas; the Ludgate Hub to convince people in urban areas and those in Government that **people would move to rural Ireland if the connectivity was there;** and Cocotte Numerique found it challenging to convince young people/entrepreneurs that available services and support will allow them to build a future in rural areas.
- ✓ **Change the image of 'reality' and ensure visibility of the hub and its services:** #hellodigital provided sessions at larger business events taking place across the region, in order to reach the large audiences and to achieve wider visibility; Cocotte Numerique provided 'welcoming support' and did territorial marketing to attract new entrepreneurs.
- ✓ **Ensure access to the services for a wider audience:** #hellodigital planned events in advance and live streamed these to make it accessible to a wider audience across the region, as well as made sessions available after the meeting.
- ✓ **Lack of availability of immediate public funding** was an issue, especially in the case of the Ludgate Hub.



5. Running a rural digital hub

The **most important aspects** of running a rural digital hub:

1. Deciding on the activities and services in the light of the specific purpose of the hub
2. Ensuring the necessary financial, technical and human resources

What activities do rural digital hubs carry out?

Activities of the hub

Key activities of digital hubs can be categorised under four main forms depending on whether they focus on businesses or the wider local community and whether they provide flexible space and co-working area or services as well (see above). The different sets of activities can be combined within a single digital hub depending on the focus and purpose of the hub.

Furthermore, the hubs can play a key role in 're-branding rural areas', and associate them with new economic and digital opportunities.

An important feature of rural digital hubs is that they do not only provide space and broadband connection, but also services to businesses and the local community. The services offered by the three examples are summarised in the table below.

	Focus on businesses	Focus on community
Provides space	<p>Legate Hub: all kinds of office spaces, training and meeting rooms, etc.</p> <p>Cocotte Numerique: networking Co-working and digital work hub offices, video-conferencing/ conference and seminar facilities</p>	<p>Cocotte Numerique: Fab Lab, Public Digital Service and Education Centre (including access to computers, wifi and young people's corner)</p>
Provides services	<p>Ludgate Hub: networking activities, introduction to the entrepreneurial ecosystem, peer-learning and skills sharing, mentoring and business advisory, eStreet – online sales by local retailers</p> <p>#hellodigital: training courses and events on various IT/digitisation subjects (e.g. '360 video', making movies, drones, data analytics, etc.) mainly for businesses</p>	<p>Ludgate Hub: Facilitating digital literacy (for young and old), training classes in 'using iPad and tablet', coding classes for young people</p> <p>Cocotte Numerique: 'Welcome' service for incoming digital entrepreneurs and their families. Education Centre (including local offices for social service, job centre for unemployed people)</p>

Re-branding rural areas

Hubs can contribute to 're-branding' rural areas and making people recognise that rural areas, not only urban ones, can also be the centre of entrepreneurship, economic and digital activity.

Marketing the town



- ✓ The Ludgate Hub created Ireland's first National Digital Week and digital conference, which attracted 1,600 attendees to West Cork.
- ✓ Cocotte Numerique carried out territorial marketing and involved a communication specialist.

What resources are needed for running the hub?

Resources required

The running costs of the hub will depend on the management (e.g. part of existing activities of an organisation or newly set up). Two of the hubs had operational costs of around 10,000 euro / month (including wages of coordinators).



The three hubs operated with very similar human resources: 2 full-time equivalent staff (FTEs) managing the hub, specialist expertise involved for specific activities and services and (often pro-bono) contribution from members of the board, steering group, association of municipalities.

The **cost of running a hub** needs to be seen in the light of the physical space used, the services offered (see above), the costs covered through other means (e.g. within overhead costs of a larger organisation or pro-bono contributions), and the location (Member State/village of the hub, e.g. average wages).

There are striking similarities in the **human resources** required for running the three hubs:

- All three examples involve two full time equivalent (FTE) staff to manage the hub and relevant services.
- There is often a contribution from specialist experts and consultants (e.g. to training events), sometimes provided pro-bono.
- There are important contributions from: a board (Ludgate Hub), the association of local authorities (Cocotte Numerique), or the Steering Group (#hellodigital) that oversee the operation of the hub and contributes to its activities.

Specialist expertise for animating hub activities

- ✓ #hellodigital requires coordination expertise on creating, managing and delivering event plans, fostering partnerships, digital marketing and on-line event management, live stream and video-editing skills.
- ✓ Cocotte Numerique requires expertise on communication and networking, ‘welcoming services’, management of fab lab and events; and specialist expertise in training and activities targeted at start-ups.

The specialist expertise required depends on the focus and activities carried out in the hub. The table below provides a review of indicative resources of the three rural digital hub examples.

	Running costs	Contributions (income) from elsewhere	Human resources
Ludgate Hub	Average monthly operating cost: €9,000 including wages (50%), utilities, rates, rent and services Annual budget is around: €120,000 , including contingency fund for repairs or one of payments required	The income from desk rental, room rental, video conferencing rental and services is around €9,000 per month	<ul style="list-style-type: none"> • Two FTEs: CEO and Community Manager • Pro-bono contribution from board members • Sectoral specialist experts to run specific projects
#hellodigital	Running costs and operational costs are absorbed as part of the overhead of Highlands and Islands Enterprise (HIE) Remaining running costs related to two FTEs, demonstration equipment, training and third-party advise.	Located in a new multi-partner building with security, catering and reception services operated by HIE. No fees are charged for services (all observed as part of overhead costs).	<ul style="list-style-type: none"> • Two FTEs managing, running and reporting on events • Steering Group • Specialist experts for events (some of them are working pro-bono)
Cocotte Numerique	Estimated yearly cost of running the hub is €110,000 (covering staff costs) .	Income generated through letting office spaces and fees for training.	<ul style="list-style-type: none"> • Two FTEs to run the hub • Association of Local Authorities ‘owns’ the hub and Director has direct responsibility and local authority staff contributes • Consultants for specific activities (fab lab, trainings)



6. Main lessons and recommendations

Large benefits for local area but also high initial investment costs

Setting up a rural digital hub can bring considerable benefits for rural towns and areas; however, the initial investment can be large and not easy to secure. Most often costs can only be covered through multiple resources and programmes (e.g. EAFRD, ERDF, national and local public funding).⁴ It follows, that often a step-by-step process needs to be followed over several years (as in the case of Cocotte Numerique). In exceptional cases, private investors (especially those with specific connection to the rural area) may be identified who see potential in the area and rural digitisation opportunities.

„My key piece of advice is that Governments need to facilitate communities to get access to research, to meeting spaces and networks, ideas, funding and mentorship.“

Grainne Dwyer, the Ludgate Hub

Consider whether rural digital hubs are the right approach for the area

Rural digital hubs are not ‘one-size-fits-all’ tools. The village and area need to have the right conditions in order to ensure the long-term success of the hub (some of which can be developed by the hub itself): (1) appropriate fast or superfast broadband connection depending on the use and number of users of the rural hub; (2) an appropriate building at a convenient location that can be made available e.g. by private stakeholders, public authorities or universities; (3) a rural location that is attractive for living and especially has good quality basic services or good potential of improving services (not only for new entrepreneurs but also for their families). A feasibility study may be needed to assess the suitability of the rural digital hub: needs of local businesses and sectors, interest from the local population, and the state of local services.

Rural digital hubs cannot only boost the economy but can strengthen the local community

Rural hubs boost the economy through attracting and improving businesses and creating new employment. They can also play a crucial role in strengthening local communities through providing community services and activities, and improving digital literacy. One of the main added values of rural digital hubs is that once the initial investment is made, broadband connectivity and facilities can be made available for several community services and capacity-building activities.

Committed leaders and community engagement from the start

A strong leadership and commitment from local leaders and organisations are crucial for the success of rural digital hubs. In all three cases, a group of leaders (board, steering group and association of municipalities) has driven the initiative.

„Communities that feel confident, inclusive, organised, and those that ultimately feel influential are those that are most likely to succeed.“

Grainne Dwyer, the Ludgate Hub

Hubs that aim to strengthen the local community need to involve local citizens and local organisations from the start. This will ensure the commitment, involvement and ownership of the hub by the community and that the hubs do not remain empty or under-utilised buildings with good connectivity.

Rural digital hubs are tools for a new strategic vision for the rural area

Improving the image of rural areas as suitable places for digitisation and entrepreneurship has been identified as one of the main challenges of digital hubs. The Ludgate Hub is a positive example of how this challenge could be overcome through active marketing, i.e. “getting the town to sell itself”. The Cocotte Numerique example also had an emphasis on ‘territorial marketing’ and training the hub staff in ‘welcoming services’.

“One of the main challenges was to change the ideas of young people in the area, to show them that they have services and support that can allow them to build a future in the local area.“

Corinne Ibarra, CoCotte Numerique

⁴ This requires political will and appropriate funding programmes to support such initiatives.