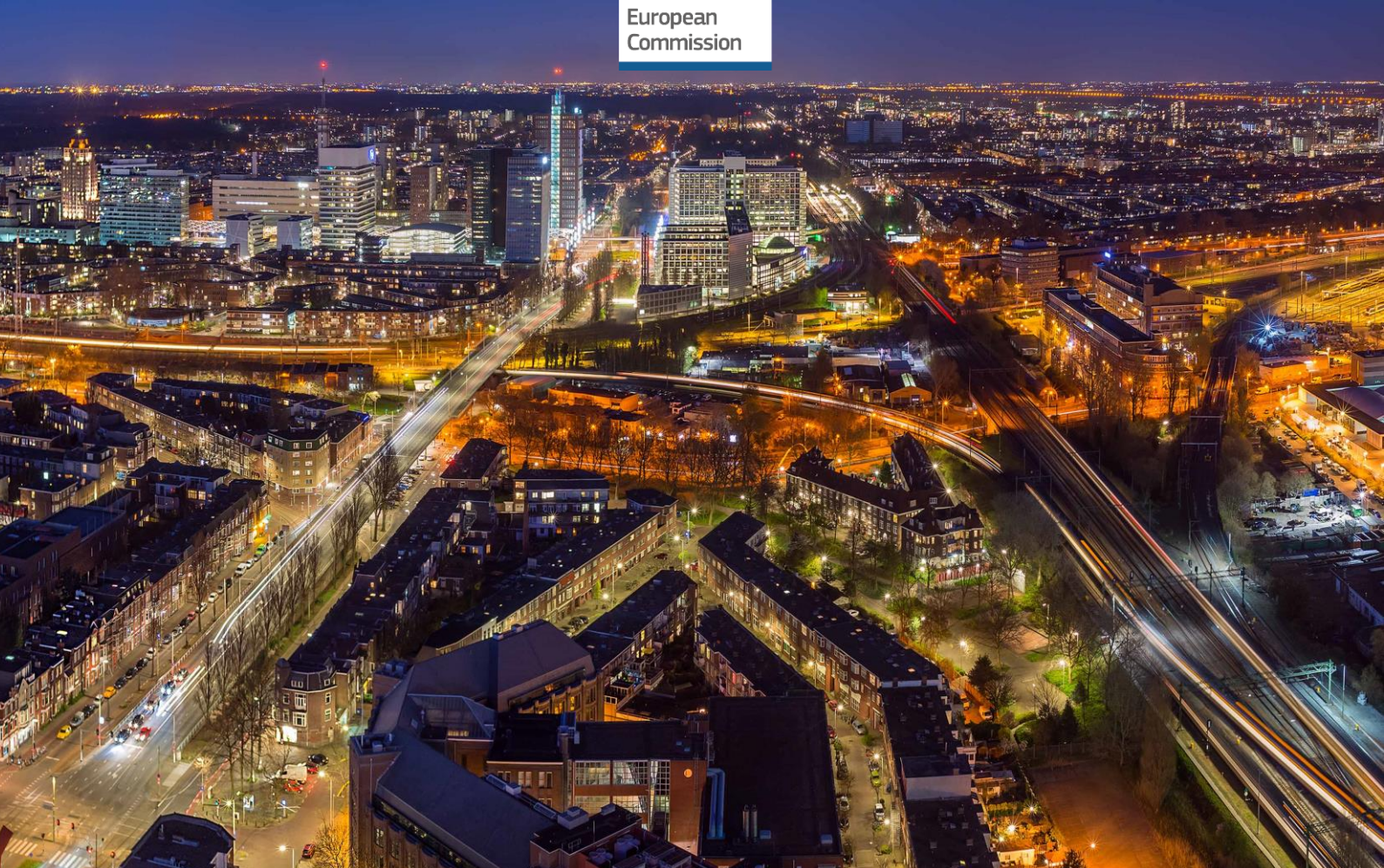




European  
Commission



The Productive City Dimension

# Digital gamechanger?

How Europe's cities are adapting to the impact of COVID-19 on jobs and skills

*Regional and  
Urban Policy*

This article is part of a series of articles based on the 14 Partnerships of the Urban Agenda for the EU. Structured around the three city dimensions of the New Leipzig Charter (the Productive, the Green and the Just City), the articles link Partnerships' actions and activities with other relevant EU projects and initiatives supported by Cohesion Policy (including Urban Innovative Actions, URBACT or Article 7 cities benefitting from ERDF). The articles demonstrate the key role of cities in the Urban Agenda for the EU and focus on specific actions they have led and implemented. Overall, the articles aim at showcasing practices and experiences on how different tools and funding support can help cities face their challenges in a strategic way towards sustainable urban development.

**Author:** Eddy Adams

**European Commission**

Directorate-General for Regional and Urban Policy

Directorate 1 – Deputy Director-General for Implementation (REGIO.DDG)

Unit – Inclusive Growth, Urban and Territorial Development (REGIO.DDG.03)

B-1049 Brussels

**Contact**

E-mail: [REGIO-URBAN-TERRITORIAL@ec.europa.eu](mailto:REGIO-URBAN-TERRITORIAL@ec.europa.eu)

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## Digital gamechanger?

### How Europe's cities are adapting to the impact of COVID-19 on jobs and skills

What lasting impact will the pandemic have on jobs and skills across Europe's cities? There is a consensus that **COVID-19 has acted as a catalyst**, accelerating prevailing trends particularly around digital working. However, when it comes to its lasting impact the opinions are split. On one side are those expecting the changes to last with all of their implications, such as high levels of remote working, increased use of digital processes and a major step-change in the need for city centre offices. On the other side are those who forecast a return to business as usual. In their view, the past year has shown us new possibilities, but it has also exposed our need for human contact and physical interaction.

As they shift their focus towards recovery, Europe's cities have business and employment amongst their priorities. Once the immediate health emergency is addressed, the need to **tackle the pandemic's economic damage** is central to a successful recovery. This article considers the position of jobs and skills and digital transition within EU urban policy,<sup>1</sup> and the extent to which it can address the stress test presented by the pandemic. In particular, it examines the way in which the operational aspects of the policy have enabled cities to respond to the fast-changing digital consequences that have emerged over the past year.

It is important to note that before COVID-19 the EU already had key policies in place in anticipation of the shift to digital. The [European Digital Strategy](#) provides the overall framework. Its comprehensive scope comprises three streams of action: technology that works for people; an open democratic and sustainable society; and a fair and competitive digital economy. Complementing this, the refreshed [European Skills Agenda](#) established 12 actions to modernise Europe's skills base. A core objective is a 25% uplift in the share of adults aged 16–74 with basic digital skills<sup>2</sup>.

From an urban perspective, the [New Leipzig Charter](#) and the [Urban Agenda for the EU](#) provide the framework for this analysis. The starting point is the position given to jobs and skills by anchors of the EU urban policy acquis. This article then offers examples of the way in which cities of all sizes are approaching this from the four corners of Europe.

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<sup>1</sup> The term *EU Urban Policy* refers to the EU's framework supporting sustainable urban development across the 27 Member States

<sup>2</sup> The European Skills Agenda sets a target of 70% of 16–74's having basic digital skills against a 2019 baseline of 56%

In response to the EU's urban policy priorities linked to jobs and skills, what are they doing on the ground? Specifically, how does the digital dimension affect their approaches and how resilient have their plans been in light of the challenges faced over the past year?

### **Jobs and skills in the Urban Agenda for the EU: embedding the digital shift**

The latest pillars of the EU's urban policy were in place before the pandemic hit Europe in early 2020. Although the [New Leipzig Charter](#) was formally approved in November 2020, its gestation pre-dated COVID-19. Prior to this, most of the Urban Agenda partnerships, including jobs and skills in the local economy and digital transition, had already produced their action plans. Each of these key documents underline the importance of multi-level governance and the value of integrated approaches. Ahead of the pandemic, they each identified the challenges and opportunities presented by the upcoming digital revolution. They also underlined the importance of cities being able to shape, rather than simply react to, the digital transformation.

The New Leipzig Charter emphasises the central role of digital in transforming urban economies and societies:

*'Digital solutions can deliver innovative and high-quality services to the public and businesses. These include smart urban mobility, energy efficiency, sustainable housing, public services, retail, supply of daily goods and civic-led governance.'*<sup>3</sup>

Alongside the **'productive city'**, the charter sets out the concepts of green and just cities. Evidently, the digital transition also has a role to play in creating the 'green city'. This became evident last spring when everything moved online, and air and road traffic came to a virtual halt across Europe. At the same time, the charter's 'just city' scenario acknowledges the risk that the next wave of digitalisation may widen inequalities, leaving those with lower skills and access to facilities even further behind.

Alongside the charter, the Urban Agenda partnerships also focus on the implications, challenges and opportunities presented by the transition to digital. The jobs and skills partnership explored this from a number of angles including competition for talent, the need for improved stakeholder dialogue and the importance of sharing good practices in digital upskilling. The Partnership Action Plan captures these, with details of some city-led actions below. Furthermore, the digital transition partnership looked beyond

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<sup>3</sup> New Leipzig Charter, 2020

the labour market, but its action plan included a focus on building the digital capacity of cities. What this means, and how it is unfolding, is also explored further below

### Mapping what works: Berlin's digital skills mapping activity



© Senate Department for Integration, Labour and Social Services, 2019

Berlin has one of the largest and most diverse science regions in Europe, supported by the city's Joint Innovation Strategy with the Brandenburg Land. This intense knowledge-based sector requires high levels of skills and qualifications and is increasingly shaped by digitisation. However, the accelerating speed of change makes it harder for businesses to forecast their future requirements.

At the other end of the spectrum, like many other cities, Berlin has seen a significant increase in the platform economy in recent years, supported by digital technology shifts. Employed as independents, workers in this sector are particularly vulnerable to economic fluctuation. **Karin Reichert** from the Senate of Berlin is a member of the jobs and skills partnership. She notes that:

*"COVID-19 has accelerated the whole topic of platform-mediated work. We expect this trend to continue after the pandemic. For Berlin, it is very important to ensure fair working conditions, also in the digital working world."*

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*“For Berlin, it is very important to ensure fair working conditions, also in the digital working world”*

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The speed of change in technology-related businesses requires a constant upskilling process. However, with high levels of self-employed workers and micro-businesses, there is a greater onus on employees managing their own lifelong learning. The rise in informal, independent learning was a central point of a [2020 Berlin conference \(Platform Economy: Decent work in times of digital transformation\)](#). There, speakers predicted future forms of skill certifications and skills passports.

The city of Berlin played an active role in the Urban Agenda’s jobs and skills partnership. It led one of the 10 resulting actions, the development of the [Digital Skills Map \(DSM\)](#). The map aims to encourage understanding and pan-EU dialogue around how digital developments are transforming the labour market. It also seeks to showcase the many effective interventions designed to boost digital skills, while giving a local voice to the EU debate around the future of work at the same time.

The DSM was one way to ensure an ongoing exchange of ideas. There are currently **60 projects from 14 countries** on the map covering a wide variety of activities, including:

- the [ELDRIS](#) project in Vienna that trains trainers and young people in artificial intelligence and robotics,
- Ghent’s innovative approach to proactively equipping its most vulnerable citizens with digital skills through [Digitaal.Talent@Gent](#),
- the [Czechitas](#) project which promotes the link between diversity and competitiveness in the tech sector across eight regions in the Czech Republic.

In December, the Senate of Berlin launched a [short movie](#) explaining how the map works and showcasing progress to date. For Berlin, the DSM is a useful portal to link local and the international approaches, at the same time keeping its own stakeholders abreast of Europe’s leading digital developments. As Karin Reichert points out:

*“Through the Digital Skills Map, Berlin contributes and presents its own approaches and examples of good practices. In turn, Berlin receives impulses from all over Europe.”*

## Talent in Porto

Of course, Berlin is not the only city competing for digital talent. Over the past decade, Porto has grown its reputation as a magnet for investment, particularly in the technology sector. Consequently, the city authority anticipated an uplift in demand for digital skills in the local economy. Working closely with the local business community, it developed a variety of channels to sustain this growing sector, combining a short and long-term approach to this challenge. The immediate priority was to plug the skills gap in order to retain and keep attracting firms. As **Patricia Romero** from the Porto City Authority explains:

*“We had a skills mismatch between the offer from companies and the local talent pool. To meet their needs, these companies were recruiting internationally. In the short term that’s fine, but looking ahead we wanted to improve access to those opportunities for our own citizens.”*

This mismatch did not only concern the city itself but also affected the Porto Metropolitan region. In the emerging pattern, Porto’s economy was increasingly characterised by technology businesses requiring advanced skills and paying higher salaries. In contrast, the wider region continued to rely on more traditional sectors, where ICT skill levels were lower. Without intervention, this would only widen regional imbalances in the future.

The intervention has comprised a number of strands. It has included initiatives like the [Porto Tech Hub](#), a collaboration portal for local businesses in the sector. More recently, Porto has rolled out a digital upskilling programme aimed at micro businesses that are struggling to keep pace with the ICT transition affecting all sectors.

The jewel in Porto’s crown, however, is its proposed talent observatory, scheduled to launch in the summer of 2021. This ambitious initiative, another of the actions under the Urban Agenda’s jobs and skills partnership, seeks to provide real-time intelligence enabling all labour market actors to operate more efficiently. Aimed at employers, education, and skills providers as well as employees, the observatory will function as a one-stop-shop for all aspects of jobs and skills.



© Canal180, 2018

A complex and ambitious undertaking, the observatory will combine primary and secondary data at city, regional and national level. This will be complemented by regular content derived from a variety of ongoing exchanges – dialogues, surveys, focus groups – with key stakeholders. As well as providing a snapshot of digital labour market supply and demand, it will analyse current and future skills needs. The observatory will also explore related issues such as salaries and employment conditions.

At city level, a key driver of the observatory's development has been the need for improved real-time labour market intelligence. As Paula Rodrigues from the city authority put it:

*"If you want to manage talent in a city, you need this kind of information. In a fast-changing world, you can't base your policies on national data snapshots that might happen every five years."*

And what about the impact of the pandemic? Has this made the observatory concept less important? Patricia Romero thinks not:

*"Right now, we are in the middle of the storm. But we know that the recovery will soon be the priority and in that case the talent strategy hasn't lost its relevance – in fact, it's the opposite."*



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### Labour market co-creation, Nordic style

Porto’s growing reputation as a digital hub may be news to some people. But Oulu in Finland has long been synonymous with technology due to its longstanding association with Nokia. As a city, Oulu has undergone its own labour market digital transition as it got to grips with Nokia’s business restructuring in the 2010s. The evolution of the story has resulted in the healthy growth of start-ups, spin outs and new small businesses, benefitting from the city’s deep reservoir of digital talent.

This experience made Oulu a natural candidate to co-lead the work of the Urban Agenda’s partnership on digital transition, which generated 15 specific actions designed to help cities manage the digital shift. Perhaps the most impressive of these was the proposal to invest in cities’ capacity to facilitate new digital developments now being rolled out under the banner of the [European Digital Innovation Hubs](#). The hubs will provide access to expertise, training and financial support as cities comprehend the next wave of opportunities, including artificial intelligence, robotics, and cybersecurity.

Oulu shows that it is not only larger cities that can set the pace of digital issues. The city punches above its weight in this policy area and is an active EU player. Oulu is also keen to share its knowledge and experience with others, for example through its membership of the URBACT [Digiplace](#) network.

Led by Messina in Sicily, the network focuses on the digital journey of medium-sized cities. Digiplace is one of several URBACT networks building cities’ digital capacities. Others include [IoTXchange](#), led by Fundao (PT), and [Tech Revolution](#) seeking to transfer good practices from Barnsley (UK) across Europe. At programme level, URBACT has also pioneered a range of [resources](#) to support online transnational collaboration.

So, how has the pandemic affected the approach cities such as Oulu are taking? **Heikki Huhmo** from BusinessOulu has been actively involved in the Urban Agenda partnership and now in the Digiplace network. He notes that there may be some lasting upsides to the way in which the pandemic has catalysed the shift to digital. For example, doing business from more peripheral regions may be less of an issue in future. Also, consumers and businesses have become more comfortable with using a wider range of digital tools and channels. Resistance levels are now lower.

He sees this period as an ideal time to think ahead while investing and laying the foundations for the future.

*“In Oulu we are strengthening our fibre network in the city. Preparation for the technical backbone side is ongoing and we’re looking for all kinds of cases showing how we can utilise 5G better in the city. We’re also providing and developing test systems which for us was one of the key topics in the Digital Transition Plan.”*

Thinking about the New Leipzig Charter’s productive city concept, what is the role of city authorities in supporting businesses to adapt to this fast-changing environment? Can we assume that the focus should be on smaller firms, as the larger ones can take care of themselves?

Heikki Huhmo thinks we need to involve both:

*“We need to create something for the small and medium-sized companies who don’t have deep enough pockets to do it themselves. In most cases though, bigger players like Nokia will get involved by, say, providing staff because they also need these other companies to come along. This co-creation approach has been the lead thinking – although this is easier said than done!”*

As ever, it is not just about the technology. Relationships and collaboration models remain key, with trust at the heart of this. So too, is the need to retain a focus on the endgame, and the added value these new tools and processes might offer. As Heikki points out:

*“From the city point of view, we need to improve the way we’re creating digital services so the ones that are made are actually used, and people find them useful – that they actually solve some end user problems.”*

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***“In Oulu we are strengthening our fibre network [and we’re] also providing and developing test systems which for us was one of the key topics in the Digital Transition Plan”***

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### **Making digital the heart of the city’s sectoral focus**

Another city building its reputation as a digital front runner is Cluj-Napoca. At the heart of Transylvania, Cluj has enjoyed the highest levels of economic growth in Romania over

the past decade. Looking ahead, it plans to capitalise on its knowledge industry assets and related human capital to focus the local economy on higher added-value sectors. The city's growing creative and cultural industries (CCI) sector is a good example of this.

Cluj was successful in applying for [Urban Innovative Actions \(UIA\)](#) funding to support its [Future of Work](#) project. As the title suggests, the project focuses on preparing the city's residents and businesses for future technological and social change. The project kicked off in 2019 and comprises a mix of hard and soft investments to improve the technological infrastructure and to boost knowledge and skills around new digital tools and processes.

Later this year the city will open three labs, each focused on a complementary dimension of the project theme. The film lab will provide access to the latest kit for CGI, VFX (visual effects) and sound management. The design lab will include 3D scanners and printers and the work 4.0 Lab will support users with machine learning and automation.

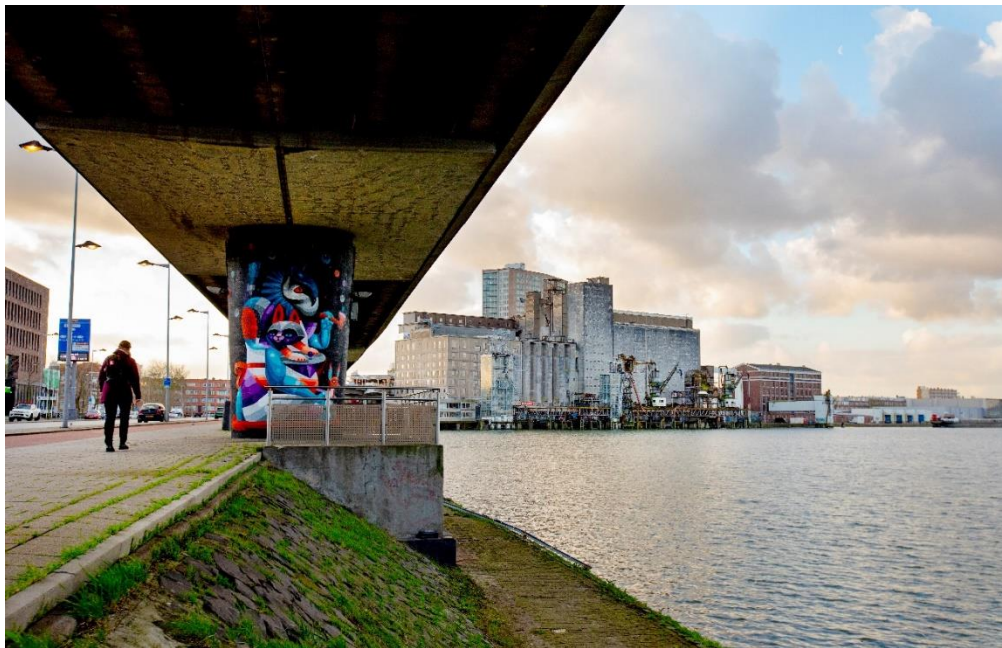
One of the main strands of the UIA project is titled *Culturepreneurship* and is designed to boost the resilience, capacity and competitiveness of the city's CCI sector. In July 2020, 69 participants were selected for the Culturepreneurship programme which covers core competencies such as business planning and marketing, as well as how to utilise animation and virtual reality processes in their work. In this way, the city plans to invest in the next wave of business leaders in this high added-value sector, enhancing Cluj's profile as a magnet for the creative industry sector.

These online programmes are delivered through the Cluj Urban Innovation Unit, which coordinates the project's public and private sector partners. The CCI sector is characterised by high numbers of micro-businesses and self-employed workers. Across Europe, the pandemic has hit them disproportionately as events have been cancelled and government schemes have struggled to respond. The city authority in Cluj has sought to protect and retain talent in the sector through continuing financial support to its small businesses and NGOs. The sector remains an important part of the city's long-term plans, as **Anamaria Vrabie** from the Urban Innovation Unit explains:

*"It has been important for the city to support the sector in these difficult months. Right now, the priority is survival and stability. But we have to also keep a focus on what happens next. In that respect, the pandemic doesn't change our priorities, or our ambitions for the city's future economy. In fact, the kind of support our project offers can only help our organisations and people, with better knowledge and experience, to be more resilient."*

Alongside its focus on the CCI sector, the UIA project also focuses on two other labour market elements related to job insecurity. One is the issue of informal work and the other automation. The former focuses on a specific Roma neighbourhood and explores the potential impact of changes to its most relevant industry sectors (waste collection and construction). The latter is an important consideration in Cluj, where 57% of local jobs are identified as being threatened by automation, 10% above the EU average.

### **Bridging policy priorities: Rotterdam's combined approach**



*© Iris van Den Broeck*

The challenge of supporting sustainable growth without widening existing inequalities is also a central question of the city of Rotterdam. The transition to a digital decarbonised economy has significant implications for Europe's largest port, with its historic links to the fossil fuel sectors.

Rotterdam has quickly responded to these challenges. Its Roadmap Next Economy was a seminal policy document signposting the direction of the city's economy and providing a framework for action. As one of the co-coordinators of the Urban Agenda's jobs and skills partnership, the city has been well-placed to align the macro and micro dimensions to the seismic shifts that were already affecting the labour market ahead of COVID-19.

On the ground, one of the keystones of the city's approach was the UIA **BRIDGE** project, which perfectly combined the sustainable economic growth and inclusive agenda. Focused on Rotterdam South, the most deprived neighbourhood in the Netherlands, it sought to tackle intergenerational poverty by encouraging young locals to make better career choices. Specifically, this meant electing pathways within Rotterdam's identified growth industry sectors. A 'career start guarantee' for students was one of the central features of the model.

A key to BRIDGE's success was the creation of a shared agenda across three key policy areas in the city – education, welfare and employment. This stronger sense of ownership around the skills supply and demand mismatch included much-improved dialogue between the city's employers and its education and skills providers. Aspects of this model now form the core of the city's innovative work learning agreements. These extend the core BRIDGE model beyond young people to include adults out of work and those moving between jobs.

A salient feature of the city's approach has been its sectoral focus. Has there been any sense that the impact of COVID-19 means that this is misplaced? Although he acknowledges that a sectoral approach implies a certain path dependency, **Maarten van Kooij**, Strategic Adviser at Rotterdam City Hall, thinks this is not the case. However, he does think that the pandemic shone a harsh light on systemic weaknesses:

*"The Dutch labour market is highly flexible with lots of people in uncertain contracts and they were the first to lose their jobs. We saw that immediately, with youth and people on flexible contracts first to be hit. It was the same after the crisis in 2008. This time they came in huge numbers and cities were given national funds to deal with it and we have managed that. But the system flaws are evident, and we all see that changes are needed to help the most vulnerable. COVID polarised the differences that were already there."*

It then seems that the analysis of the labour market problems remains sound. But what about the solutions? Do we tone down the sectoral dimension and focus more on core digital skills?

*"I think digitalisation will stay. In terms of skills, digital is starting to be a generic thing. It has to be woven through all sectors. Those sectors are just the starting point because that's how we look at the labour market. We're changing our perspective on data analysis to get a better understanding of this. We gather a lot of data of course, but we're now trying to look at it differently, especially when it comes to skills."*

How Rotterdam approaches this will be worth watching in the months to come. As an [Article 7](#) city with an effective [integrated territorial investment \(ITI\)](#) strategy benefiting from the Cohesion Policy, it has a reputation as a [leading exponent](#) of integrated sustainable urban development. Rotterdam's renewal agenda comprises a number of major infrastructure projects including moving an entire neighbourhood away from using natural gas and replacing Rotterdam's sewerage system. The city is in multi-stakeholder dialogue around the skills needs for these major city projects. On the one hand, this will involve funding new programmes to equip people with the right skills and, on the other, it will involve innovative approaches to the so-called 'employment paragraph' within the city's Social Return on Investment (SROI) framework, to ensure that these opportunities are open to all.

### On the right track

These five cases provide valuable insights into how cities are addressing the jobs and skills and digitalisation challenges and preparing for what lies ahead. All of them confirm that the pandemic has altered established business models and acted as a catalyst for trends that were already evident. It seems unlikely that working life will ever be the same after COVID-19.

Although the EU urban policy pillars could not have anticipated this level of disruption, in relation to jobs and skills, the general analysis remains valid. The central trends of digitisation and decarbonisation remain the key drivers, presenting opportunities and threats at city level. The well-established systemic issues – such as the mismatch between the education system and the labour market – remain. So too does the risk that the ever-growing need for higher skills leaves increasing numbers of our citizens in poverty.

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***All case studies confirm that the pandemic has altered established business models and acted as a catalyst for trends that were already evident.***

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In terms of resources to support this transition, the new [Cohesion Policy](#) confirms the continued and reinforced focus on urban areas, which will receive at least 8% of the European Regional Development Fund at national level. Underpinning this, policy objective 5, *A Europe closer to citizens*, should ensure that addressing the impact on citizens remains a priority. As the focus shifts to rebuilding, cities will also be able to mobilise the new [Resilience and Recovery Facility](#) to help consolidate and build on their initial responses to the digital transition.