

Digital Underdogs: Economic Opportunity and the 'Ordinary' City

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Recent events and political developments across OECD countries should quell any doubts about the socio-economic and socio-spatial implications of economic change. One of the fault lines that threatens most to exacerbate inequality both between and within urban regions is the 'digital divide', which privileges people and places with capacity to develop and apply digital technologies and disadvantages those without. Economic advantage in knowledge-intensive sectors, all of which require digital capacity, tends to spatially concentrate in large, economically secure urban regions with the requisite research infrastructure and highly educated human capital as well as the civic cultures, amenities, and quality of place that attract and retain them. Mid-sized, 'ordinary' cities with manufacturing specializations and concentrations of low and middle skill workers continue to struggle with restructuring. Already presenting complex policy challenges for regional economic development across industrialized countries, these dynamics are widely foreseen to accelerate as the processes of digitization and urbanization progress.

1. What was your key research question and what is your major finding from the research?

(A) Research Questions & Methodology:

The analysis is framed according to three research questions that align with three dimensions of digital opportunity. First, from a *spatial* perspective, we are interested in the prospects for *creating* digital opportunity in mid-sized cities, and ask:

1. *How are mid-sized cities outside established digital corridors responding to digital economy demands? Are they implementing long term transformative strategies to encourage innovation or do they rely on more conventional business attraction approaches. If so, what policies and programs do they pursue?*

Second, from a *socio-technical* perspective, we are interested in the prospects for *expanding* digital opportunity in mid-sized cities, and ask:

2. *Do local digital economy strategies seek to include groups typically under-connected to the digital mainstream or do they rely on conventional talent attraction strategies? If so, what policies and practices are pursued? Are the key drivers primarily local or enabled by public policy?*

Third, from an *institutional* perspective, we explore the ways in which public policies interact with local governance capacity to shape the prospects for digital innovation and inclusion in mid-sized cities. Of particular interest is the question of convergence; are similar practices

emerging across mid-sized cities or do macro-institutional and policy differences definitively shape strategic diversity?

3. (a) What is the role of public policy in facilitating digital innovation and inclusion at the local scale? What local organizations, strategies, and programs emerge as a result of public intervention? What are the implications of these findings for our understanding of place-based approaches to public policy?

*3. (b) What **local** institutional factors shape urban development strategies for creating equitable digital opportunity in mid-sized cities? How do patterns of local politics and development discourses enable or constrain strategic efforts?*

To test theoretical propositions about how public policies and local institutions intersect to shape digital opportunity, this research compares digital innovation, digital inclusion, and economic governance in four mid-sized (pop. 350 to 500,000) restructuring cities operating in four different policy contexts, two in Europe and two in North America. These include: Greensboro, North Carolina in the United States; London, Ontario, Canada; Saint-Etienne, France; and Tilburg, Netherlands. Comparing how local governance and public policies intersect to shape the *creation, expansion, and governance* of digital opportunity, we find substantial variation but also important similarities.

(B) Findings:

Not surprisingly, the findings of this project are decidedly mixed. One of the definitional aspects of urban research is variation; patterns of similarity and difference cut across jurisdictional contexts and policy fields. The analytical objective is not just to describe how, but to explain *why*. Consistent with earlier comparative studies of multilevel and urban governance, we find that urban policymaking is mediated through multilevel arrangements that are powerfully determined by macro-institutional policy contexts, but also shaped by local political choices. Highly variable but not entirely idiosyncratic, different patterns of urban policymaking between upper level governments and local coalitions emerge in different contexts. Building out from this well-established theoretical observation, three different sets of findings emerge from this research.

First off, contrary to assumptions that governance fragmentation prevails in 21st century urban political economies, we find evidence of multi-stakeholder and cross-sector policy innovation in three out of our four cases. Each shaped by different coalitional forms and emerging in different urban policy arenas, novel approaches to regional innovation, digital inclusion, and economic governance were evident in Saint Etienne, Greensboro, and London respectively. In Tilburg, Netherlands, there was little evidence of multi-stakeholder cross-sector networks focused on either digital innovation or inclusion.

In terms of **creating digital opportunity**, local government and publicly funded nonprofits in Saint Etienne, France are collaborating on the most ‘**progressed**’ policy innovation of the three. Leveraging national programs and coordinating local resources, the **DesignTech** initiative supports economic transformation from a centuries old industrial specialization in heavy steel manufacturing for arms production to a new specialization integrating industrial design, digital technologies, and advanced manufacturing. Unified by this core vision, multiple public programs have since been implemented or are currently underway including La Cite du Design, the Plan Achille campus, entrepreneurial incubators such as Designers + and DesignTech Saint Etienne, and a Design Masters program at Universite Jean Monnet.

In terms of **expanding digital opportunity**, the most ‘**inclusive**’ policy innovation of the three, which also demonstrates the broadest multi-stakeholder structure, emerged in Greensboro, North Carolina. **InnovateGSO** was a project-based initiative intended to make Greensboro “the epicenter of inclusive innovation” by expanding knowledge-based economic opportunity to underserved populations in the city. Funded through a competitive nonprofit grant, participants were drawn from local government, foundations, social, cultural, and economic development nonprofits, the healthcare sector, and several large local firms, meeting regularly over two years to develop a collective vision for, and programs to support, economic transformation in this largely deindustrialized city. These efforts resulted in the Triad Navigator project, a web-based tool designed to connect entrepreneurs to the local support ecosystem, and the Industry Innovation and Design User Group which spun out to work on a proposal to downtown innovation district.

Finally, in terms of **governing digital opportunity**, the most **coordinated** innovation is a governance one. Driven and funded by local government and launched in 2014 by the Mayor as part of a larger policy agenda to better coordinate economic development resources in the city, the **Community and Economic Roadmap** is a governance initiative intended to improve inter-agency coordination for strategic economic development planning in London, Ontario. A formally institutionalized multi-stakeholder network with dedicated working groups, a dashboard to report progress, and supported by city staff, participants include chief executives of all economic development and related organizations in the city, as well as representatives from the business community, Fanshawe College and Western University.

So, regardless of differences in macro-institutional context, it would appear that conscious policy decisions and the coalitions to support them are evident in three of the four ‘ordinary’ cities, suggesting substantial local autonomy for urban economic policymaking. However, several other findings provide important correctives to these ostensibly counter-intuitive observations.

First off, governance arrangements may exist, but this does not necessary equate with institutional durability and program viability. Of the three innovations described above, only the DesignTech initiative in Saint Etienne remains active and functional, yet institutional clutter and a technocratic approach to program design results in a situation not atypical in France

where too many services are offered to too few firms and entrepreneurs and program take up is suboptimal. Not atypical in the US, the time-limited and project-based InnovateGSO network proved to be ephemeral, continuing to meet for a time after funding ran out but eventually fading out as participation attenuated. Of the two projects generated, one is operational but low impact, and the other has since been abandoned as infeasible. Finally, the most coordinated network of the three was also the most conflictual. Not atypical in Ontario, while London's Community and Economic Roadmap was launched to high aplomb and higher expectations, political impatience with weak performance and inter-agency conflict made precarious its contingent funding and the network is currently dormant and exists largely in name only.

Several additional observations call into further question the extent to which 'ordinary' cities can build and sustain the institutional capacity to effect digital economy transitions. Despite the three policy or governance innovations described above, overall performance in all four cities across the three areas of digital innovation, digital inclusion, and economic governance is fragmented, inconsistent, and marginal. All subject to trade-offs of one form or another emerging at the intersection of macro-institutional and structural factor and local political choices.

In terms of **creating** digital opportunity, Saint Etienne, operating in a heavily **statist** policy context, is the only city-region to demonstrate sustained progress on the digital innovation agenda. Though to varying degrees, assets to support digital innovation were present in the three other cities, weak connections between conventional economic development and innovation system actors, and a preoccupation with orthodox firm attraction and ineffectual 'cluster' strategies has left innovation actors and assets under-developed and disconnected from urban economic policymaking.

Somewhat counter-intuitively, though it was operating in an **entrepreneurial** policy context, Greensboro was the only city to demonstrate both policy *and* governance innovation on **expanding** digital opportunity. In all other cities, urban policy actors (including colleges and universities) expressed awareness of the negative implications of unequal employment opportunities that will get worse as the use of digital technologies expands, and have in place workforce development systems, entrepreneurial supports, and nonprofit makerspaces, but their attention to digital inclusion was marginal. The only exception is Telecom Saint Etienne, the School of Engineering that is piloting a small program that provides a career pathway into software engineering for underserved youth.

Exhibiting interesting differences and similarities in economic **governance**, institutional capacity was difficult to build and even more difficult to sustain and none of the cases are 'success stories'. Operating in an ambiguous **hybrid** policy context, though London developed the most formalized and coordinated economic governance institution, it was also the most conflictual. A siloed and technocratic approach in Saint Etienne, and fragmentation and narrow dominance of the economic development agenda in Greensboro precludes strategic governance in both

places. Further analysis is required to describe the apparent absence of cross-sector governance in Tilburg.

2. What do your research findings mean for our understanding of Canada's digital opportunity?

One of the main arguments of this research is that economic transformation will fail without careful attention to local politics. Substantiating growing concerns about the socio-economic, socio-spatial, and socio-technical consequences of uneven regional development that are likely to accelerate in the digital economy, we find that 'ordinary' cities are not 'resilient' in the face of disruptive economic change. Longstanding *institutional* structures in mid-sized cities have been disrupted alongside *industrial* ones. Despite important variation in multilevel governance and policy support from upper level governments, none are 'success stories' and local institutional capacity is insufficient for strategic economic policymaking in all four cases. Trade-offs, fragmentation, or conflict over who should decide local policy priorities means that these places - and the people *in* these places - are not well positioned for adaptability to the economic and employment shocks of a rapidly accelerating digital technology curve.

These findings have direct implications for our understanding of digital opportunity in Canada. It is significant that of the three cities demonstrating policy and governance innovation in response to economic restructuring, ***the Canadian case demonstrated the weakest performance across all three research questions.*** Corroborating findings from previous research on London, we find that political conflict impedes progress on both digital innovation and inclusion agendas. Despite formalized efforts and dedicated resources to develop and implement a Community Economic Roadmap for strategic economic governance, political conflicts precluded progress. Local policy attention has largely overlooked a vibrant, diverse, and growing 'digital creative' sector. London also charts the weakest performance on digital inclusion and few career pathways exist into the local digital creative sector, forcing several local firms to recruit staff in Toronto.

Clearly, there are substantial methodological constraints to generalizing accurately across all 'ordinary' cities in Canada, or even across Ontario. However, focusing on an Ontario city is of particular relevance because of the province's unique position in the national political economy. With the 'digital corridor' stretching from Toronto to Waterloo, much national digital advantage is concentrated in the southwestern corner province. At the same time, Ontario is Canada's industrial heartland and much of the country's mature and advanced manufacturing is also concentrated in the Southwestern region of the province, primarily in mid-sized or 'ordinary' cities. From St. Catharines and Niagara Falls, to Oshawa, Hamilton, Kitchener, London, and Windsor, along with many smaller cities and towns in between, Ontario has more than its fair share of restructuring 'ordinary' cities. Findings from this research about weak local capacity for economic policymaking have important profound implications for understanding the spatial dimensions of digital opportunity in this country. Rapidly losing economic

opportunity with little in the way of digital or digitally-oriented specializations to replace them, these places could be in danger of permanently hollowing out. Policy interventions are required that acknowledge the inherent challenges of local capacity-building.

3. What are the key *policy implications* that flow from your findings.

This project is not the only one to emphasize the economic, socio-spatial, and socio-technical implications of the digital economy. Concerns about uneven development and the bifurcation of economic opportunity between people and places with the ability to develop and use digital technologies and those without have begun to surface in the popular press and on the policy agendas of influential think tanks like the OECD and Brookings Institution. No longer simply an academic question, these analyses have begun to equate stark differences in urban fortunes – linked in many ways to differences in digital capacity - with highly political consequences. The election of Donald Trump, Brexit, the yellow vest protests in France, and the election of Doug Ford as Premier of Ontario, all indicate that the need for meaningful responses is pressing.

Since the spatial consequences of globalization and technological innovation became apparent, uneven regional development has presented a pernicious policy conundrum. We know that universal public policies imposed uniformly by top down fiat will not help disadvantaged regions pull ahead, yet simply downloading development pressures to local areas and expecting them to be ‘entrepreneurial’ about their own fates has similarly resulted in suboptimal economic performance and regional competition rather than coordination. Large conurbations and digital technology powerhouses have abundant flows of ‘people, capital, and ideas’. With net out-migrations of these very assets, ‘ordinary’ cities are in danger of permanently falling behind and cannot be left to their own restructuring devices. Juggling multiple competing policy challenges with insufficient institutional resources - including expertise - they cannot be left to their own devices to restructure.

Emphasizing the crucial importance of simultaneously addressing the needs of both people *and* place, a renewed interest in place-based approaches has prompted experimentation with novel ways to design policies and deliver programs that are both locally sensitive and publicly accountable. In this approach, through formalized multilevel governance arrangements upper level governments provide policy objectives, expertise, funding, and accountability measures and local areas are given autonomy to collectively determine the best way to strategically deploy resources, local knowledge, and unique assets to regional advantage. *This inherently requires local institutional capacity*, which as we have seen, varies widely but is weak in ‘ordinary’ cities.

Again, one of the main arguments emerging from this research is that public policies with socio-spatial and socio-technical implications *will fail without attention to local politics*. As we have seen, local governance for policy innovation is difficult to establish, and even more difficult to sustain. Policymakers cannot implement place-based policies without a careful understanding

of the challenges and barriers to institutional capacity building for urban policymaking. Some of these such as local specialization are structural, others such as funding mechanisms, are policy-related, yet still others are highly *political*. Public, private, and nonprofit urban actors genuinely struggle to determine what's best for their city, while competing for position to get their ideas on policy local agendas and to promote organizational interests. In short, urban policy innovation is hard. Rather than simply expecting local areas to adapt to market forces on their own and then punishing them for underperformance, place-based policies are required that provide the support and incentive structures necessary for the deliberative networks essential not just to urban *technological* innovation but also to urban *policy* innovation.

However, precisely what this entails remains a wide open question, and ***one of the most pressing of our time***. Though governments operating in various contexts continue to experiment with ways to deliver public policies that support local development initiatives, there is little consensus over how these should be structured, delivered, and evaluated – or whether they even result in the wished for regional development outcomes. Thus, 'elephant in the room' remains. It is by no means clear that 'the state' even has the capacity to address this problem, which manifests across policy silos and levels of government. Typically, politicians and staff lack the mandates, knowledge, skills, stakeholder engagement, policy frameworks, and enforcement mechanisms required, leaving restructuring 'ordinary cities' with weak local capacity in a tight spot indeed.