Regeneration Through ICT, Innovation and R&D

A 'circular' walk around the Silicon Roundabout and Tech City Area
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Introduction

This self-guided walk is specifically designed to help you explore how the innovative ICT industries can help spur urban regeneration and local economic development.

The walk will take you around the area known as Silicon Roundabout and Tech City, the evolution of which offers an interesting case study in the dynamics of ICT, Innovation and R&D-led urban regeneration. The Silicon Roundabout, initially a term coined in jest in 2008, refers to a collection of tech start-ups located around the Old Street roundabout in London. This area has since evolved into a cluster known as Tech City, driven by both organic growth and targeted government support.

Development Trajectory

Silicon Roundabout began as a modest collection of tech start-ups, just around the time of the Global Financial Crisis. The UK government, recognizing its potential for economic growth and urban regeneration, officially supported its development into Tech City. This governmental initiative aimed to transform the area into a vibrant tech agglomeration, mirroring the success of Silicon Valley. Tech City's growth was partly facilitated by the proximity of London's financial district, which helped to foster a thriving fintech sector. Notable companies in this sector include Wise (on Shoreditch High Street), and other fintech firms like Monzo and Starling, a short walk south towards the City.

Importance for Regeneration and Local Economic Development

The development of Tech City has been instrumental in establishing London as a leading global tech cluster. This transformation has brought significant economic benefits, including job creation and increased venture capital investment. Investment in the area of major tech firms like Google, Microsoft, and Cisco, along with the location of numerous start-ups, has not only driven technological innovation but also contributed to the regeneration of the East London Tech City, previously characterized by industrial decline.

Firms & Universities in the Area
Tech City hosts a diverse array of companies, ranging from global giants to innovative start-ups. Some notable firms include Microsoft with its developer community hub, the Microsoft Reactor; Cisco Systems, Amazon and financial and professional services providers like Barclays and KPMG, which offer specialized services to technology companies in the area. In addition, an impressive range of universities act as academic partners, including Queen Mary University of London, City University, London Metropolitan, UCL and Imperial. These universities have been instrumental in bridging the gap between academia and enterprise.

Local Authorities' Role
Local authorities and the UK government have played a crucial role in encouraging ICT and other innovative firms to establish themselves in the area. Initiatives like the Tech City Investment Organisation (TCIO) (launched in 2011, but later rolled out nationally as Tech Nation (NDPB)) were established to help spur growth and investment in the cluster. Moreover, the government's policies, such as the Enterprise Investment Scheme (EIS) and Seed Enterprise Investment Scheme (SEIS), have been pivotal in fostering a conducive environment for angel investments and start-ups.

Not All Rosy
However, the rapid growth of Tech City has not been without its challenges. Increased rents and overheads have led to concerns about sustainability and the displacement of smaller start-ups. Moreover, the concentration of tech companies has raised questions about the broader socio-economic impacts, including potential exacerbation of income inequality and gentrification.

During your self-guided walk, it is important that you reflect on both the positive and negative impacts of such a tech-focused urban regeneration: for instance, the balance between economic growth and social equity; the role of government in fostering innovation hubs; and/or the sustainability of such urban developments in the long term.

The walk should take approximately 2 hours at a moderate pace.

The Route:

➔ Arrive at Old Street Station via whatever route suits you best. Exit the station onto the A501 (“City Road”) where it intersects with Old Street.

STARTING POINT

Before the emergence of Silicon Roundabout, the area around Old Street Station was markedly different from its current tech-centric identity. Historically, this part of London was more known for its industrial and commercial activities, typical of many inner-city London areas. The landscape was a blend of residential, light industrial, and commercial spaces, the remainders of which you’ll see on your walk. The station itself was originally opened in 1901, as an extension of London’s first ‘deep-line’ tube railway that connected Southwick to the City of London. Over the years it has been transformed into an essential commuter hub that services the burgeoning local tech sector.

⊙ **Stop One:** You are now standing at the intersection of the A501 and Old Street, on Silicon Roundabout. As previously noted, the name Silicon Roundabout (coined as a joke by Matt Biddulph, a tech entrepreneur) reflected the increasing concentration of innovative tech companies around the Old Street roundabout. The first firms to locate in the area were primarily small tech start-ups, which were pivotal in establishing the area's reputation as a tech hub. Two of these ‘early adopters’ included:

- **Last.fm**: One of the early success stories, Last.fm, was a music streaming and recommendation service that represented the innovative spirit of the emerging tech community.
- **TweetDeck**: Another early entrant, TweetDeck, a social media dashboard application, exemplified the kind of tech-oriented ventures drawn to the area.

…. But there were many more!

Several factors contributed to the congregation of start-ups in this particular location:

- **Affordability**: During the late 2000s, the area around Old Street offered more affordable office space compared to other parts of Central London, making it attractive for start-ups operating with limited budgets.
- **Location**: Its proximity to the City of London, a global financial center, provided easy access to potential investors and clients.
- **Cultural Vibe**: The broader Shoreditch and East London area had a burgeoning creative and artistic scene, creating a vibrant and stimulating environment conducive to innovative thinking.
- **The cluster effect:** The desire to be part of a growing community of like-minded tech entrepreneurs in which the start-ups could benefit from being in close proximity to each other, played a significant role in attracting more start-ups to the area.

Reflections: *As you get your bearings, start to notice the juxtaposition of tech start-ups and established firms – potential evidence of the area's evolving economic landscape. How do think these varied businesses contribute to the economic dynamics of the area?*

By 2010, the organic growth of this tech cluster had caught the attention of the UK government, which, recognizing its potential, officially supported its expansion into what is now known as Tech City. In 2010 there were 85 start-ups in the area. With government support, by 2011 the number had grown to over 200 firms. The appointment of entrepreneur Eric van der Kleij to lead the initiative further accelerated the area's development, attracting a wider range of companies, including larger tech firms and multinational corporations. By late 2012, Wired magazine reckoned that around 5000 tech-related firms had located to the wider Old Street area.

Reflections: *Consider how the area evolved from a nondescript part of London into a significant tech hub: the factors that influenced its development. Many of these were organic and, possibly, down to chance. However, strategic government initiatives seemed to offer a definitive spur. What are your thoughts regarding the impact of governmental support in transforming this area? How would you further investigate the role of government support?*

➔ Keeping the station and central roundabout behind you (i.e. facing the A501) go left towards ‘The Bower’ located at 207 Old Street. This is your next stop.

⊙ Stop Two: The Bower, 207 Old Street

The Bower stands as a striking example of the transformation of the Silicon Roundabout area from an industrial past to a modern, tech-centric economy. The development is a landmark quarter for Old Street, featuring 320,000 sq ft of modern space that includes offices, restaurants, and retail destinations. The complex is composed of three distinct yet united buildings: The Tower, The Warehouse, and The Studio. The Tower provides 171,000 sq ft of Grade A office space, designed to bridge the gap between the creative and corporate sectors. This building was completed in 2018 and symbolizes the area's evolution into a space where tech giants, advertising agencies, financial, and legal specialists coexist. The Warehouse and The Studio, completed in November 2015, are home to a range of creative, media, and tech companies including Farfetch, Intercom, VMware, Allegis, Stripe, and Pendo. These buildings offer large private terraces with impressive city views, apparently ‘catering to the needs of contemporary businesses’.

This modern commercial complex reflects the area's shift from an industrial past characterized by traditional manufacturing and trade to a present dominated by digital and creative industries. Seen in a positive light, this development typifies the impacts that help spur economic growth:

1. **Economic Diversification**: The Bower attracts a variety of businesses, fostering economic diversification. This not only creates job opportunities but also attracts a diverse workforce, contributing to the economic vitality of the area.
2. **Urban Regeneration**: Developments like The Bower are instrumental in urban regeneration. They replace out-dated industrial structures with modern spaces that are more suited to the needs of contemporary businesses, thereby revitalizing previously declining areas.
3. **Cultural Shift**: The Bower and similar developments signal a cultural shift in the area. From a predominantly industrial and commercial zone, the area has transformed into a hub for creativity, innovation, and tech, attracting a different demographic and changing the social and cultural dynamics of the neighbourhood.
4. **Rising Property Values and Gentrification**: Such developments can lead to rising property values, which might contribute to gentrification.

Whilst this can have mixed effects on the existing community, sometimes leading to displacement of lower-income residents and small businesses, it also means that wealthier classes are moving in.

5. **Creation of a Tech Ecosystem**: By housing a mix of start-ups and established tech companies, The Bower contributes to the creation of a vibrant tech ecosystem. This ecosystem is crucial for fostering innovation and collaboration among businesses.

Reflections: *All this is well and good. However, what are some of the negative implications of such modern developments on the local urban character and social fabric? Previously an area of low rents in which local light-industrial business could afford to locate, and previously an area in which residential property values were low-to-modest for London, what are the implications of such commercial and residential gentrification on the existing local community?*

➔ Turn slightly back on yourself, and head along the A501 (Old Street) towards Shoreditch High Street. On the way you will pass an impressive array of tech firms, funky cafés, old social housing, and an Art'Otel – a hotel specifically designed to mix high-end accommodation with an art hub, creative studios, workshops, a spa and cinema. The hub-and-spoke design building occupies a prominent corner site where Old Street meets Great Eastern Street, within the South Shoreditch Conservation Area. Keeping the hotel on your left, continue along Great Eastern Street towards Shoreditch High Street. You'll pass by Work Life (which rents out private office space, co-working spaces and meeting rooms to start-ups and entrepreneurs), Inter-Digital Europe, a business and management college and various businesses that add to the culture and buzz of the area. Once you get to Shoreditch High Street, turn left towards the arched bridge.

⊙ **Stop Three: Shoreditch High Street, Tea Building**

The Tea Building is a flexible working space providing offices and facilities to a range of companies, including ICT and fintech firms. For example, located at number 56 is Wise Payments Limited, formerly known as TransferWise. Established in 2011, Wise is a UK-based financial technology company that specializes in cross-border payment transfers. Its use of technology to innovate and streamline financial services has led to success in a market traditionally dominated by mainstream banks, helping to drive competition and foster the development of more fintech services in the area. In 2021, it went public on the London Stock Exchange at a value of $11 billion.

The area is brimming with examples of ICT and fintech firms that contribute to its reputation as a centre for financial innovation and technology. The variety of start-ups spans sectors such as mobile-only ticketing platforms like Dice.fm (which provides fair-priced tickets with low-cost fees) healthtech firms like Supercarers (which connects carers with those in need of care), musictech firms like JukeDeck (which uses AI for music composition), proptech firms like Rentify (which makes it easy for landlords to rent out properties) and more.

Reflections: *What do you think such diversity of firms and innovation adds to the start-up ecosystem in Tech City? Can such diversity help it ride out shocks? In what ways does attracting a pool of talent and entrepreneurship fosters the area's growth as a leading tech hub? How might a SWOT analysis help you unpack the potential of this area?*

➔ NOTE: You will need a map for the next set of directions (see Extra Map A). Turn back on yourself to head back along Shoreditch High Street. When you come to the junction of the A10, Commercial Street and Old Street, carefully cross the road so that you can head down Plough Yard. At a small junction, turn left to stay on Plough Yard, which then turns right to become Hearn Street / Principal Place. At the 4-way junction, cross the road and head along **Worship Street**. **About half way along** you will pass the Microsoft Reactor, which is in an adjacent road (70, Wilson Street). **Pause**.

⊙ Stop Four: Educational Institutions and Knowledge Hubs.

When we speak about educational institutions, we often think about universities, especially when it comes to R&D and the important role that universities play in supporting clusters and innovation. For sure, as previously noted, many universities including City University, Queen Mary, Imperial and UCL have supported Tech City, not only acting as places of learning, but also as incubators for new ideas and technologies, often providing the foundational R&D upon which Tech City companies have built practical applications. Indeed, universities have been instrumental in supporting Tech City, advising on creating spaces conducive to tech start-ups and entrepreneurship, and fostering a student presence that contributes to the area's innovative spirit.

However, beyond academic institutions, other 'knowledge hubs' like the Microsoft Reactor on Wilson Street serve as vital nodes in the innovation network. These hubs, often established by private companies, complement the theoretical and research-oriented contributions of universities by providing practical, hands-on experiences. They bring together developers, entrepreneurs, and business leaders to collaborate and turn innovative concepts into market-ready products and services.

The Microsoft Reactor, specifically, is a place for local software and app developers, IT professionals, and start-up entrepreneurs to connect, collaborate, and learn. It serves as a platform for networking, sharing innovative ideas, and accessing Microsoft resources and expertise. With access to technology, mentorship, and workshops, such spaces are integral in transforming R&D into tangible, innovative solutions that drive the industry forward.

Reflections: Thinking about the relationship between universities, knowledge hubs, and Tech City's success, consider how you might research the following questions:

1. In what ways have specific universities engaged with and supported the development of Tech City, and what unique assets have they brought to the tech ecosystem?
2. Considering places like the Microsoft Reactor, in what ways do knowledge hubs complement the theoretical work of universities to advance R&D in Tech City?
3. What are the tangible benefits that entities like the Microsoft Reactor provide to entrepreneurs and start-ups, and how do these benefits catalyze growth within Tech City?

➔ Continue along Worship Street to the A501. Turn Left and head to Stop Five – Finsbury Square.

⊙ **Stop Five: Tech City's Corporate Presence - Finsbury Square**

Established firms like Cisco and Microsoft have significantly contributed to the economic landscape of Tech City. Cisco's digital technology hub and the Microsoft Reactor are more than just offices; they are symbols of the area's technological prominence and its capacity to attract global tech players. These larger companies bring stability, financial resources, and extensive networks, which are vital for the ecosystem's sustainability.

At its Finsbury Square location, Cisco houses a significant portion of its cloud-based technology division, including Meraki Networks, focusing on mobility and security. This office represents Cisco's commitment to the UK's digitisation efforts, supporting growth and innovation. As a knowledge hub, it is instrumental in fostering an environment that enables the creation and expansion of digital infrastructure, contributing significantly to the Tech City cluster's development as a centre for digital innovation.

The impact of such established firms on the local economy is multifaceted:

- **Job Creation**: They provide a substantial number of high-skilled jobs, as well as attracting a high-skilled labour pool, thereby contributing to the economic vitality of the area.
- **Investment and Development**: Their presence attracts further investment, both from venture capitalists and other businesses looking to tap into the vibrant tech scene.
- **Knowledge Spill-overs**: The concentration of tech expertise fosters a knowledge-sharing environment, benefiting start-ups and other local businesses.

Reflections: *Cisco is a multinational corporation with operations around the globe. What benefit is there for such a company to locate in area that is dominated by start-ups? Put another way, for a firm like Cisco (or Microsoft), they are such 'attractors' of talent, do they really need a presence in the East London Tech City? What attracts such multinationals to this end of London?*

➔ Make your way north along the A501 to your final stop, Old Street Station.

⊙ **Stop Six:**

The diversity of tech start-ups and established firms at Silicon Roundabout and Tech City creates a dynamic and robust economic landscape. The start-ups bring innovation and entrepreneurial energy, while the established firms provide stability, resources, and broader economic benefits. Together, they create a symbiotic ecosystem that not only drives technological advancement but also contributes to the area's economic resilience and urban regeneration. This synergy is essential in driving forward the tech sector's growth and its spill-over effects on the local economy.

- **Diversification of the Economy**: The variety of businesses contributes to a diversified economic base, making the area resilient to sector-specific downturns.
- **Attracting Talent**: The mix of companies attracts a wide range of talent, from aspiring entrepreneurs to experienced tech professionals, further enhancing the area's human capital.
- **Urban Regeneration**: The tech-driven economic activity has played a pivotal role in the urban regeneration of the area, transforming it from a post-industrial landscape to a thriving tech hub.

However, the rapid growth of Tech City has not been without its challenges. Increased rents and overheads have led to concerns about sustainability and the displacement of smaller start-ups. Moreover, the concentration of tech companies has raised questions about the broader socio-economic impacts, including potential exacerbation of income inequality, gentrification, and local population displacement.

Reflections: *As we come to the end of this walk, just reflect for a moment on the tensions that exist in urban regeneration projects. Is it possible to strike a balance between fostering innovation and preserving an area's original character and diversity? How can cities foster technological innovation while ensuring social and economic inclusivity? Considering the socio-economic changes brought about by this tech-led urban regeneration, how can such regeneration initiatives balance economic growth with social equity?*

You are now at the end of the walk. Have a safe journey home!

Sample Resources

Stop One

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Towards Stop Three

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- https://wise.com/
- https://en.wikipedia.org/wiki/Wise_(company)
- https://hubblehq.com/blog/list-of-startups-in-shoreditch

Stop Four

- Report on the role of universities in regional innovation ecosystems: https://www.reichert-consulting.de/wp-content/uploads/2021/11/EUA_-TheRoleofUniversitiesinRegionalInnovationEcosystem_report_final_2019.pdf
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