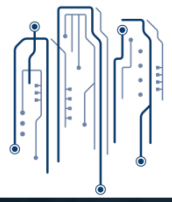
Smart Districts and Docklands Developments

Liam Heaphy
@HeaphyLiam

Réka Pétercsák
@RekaPetercsak



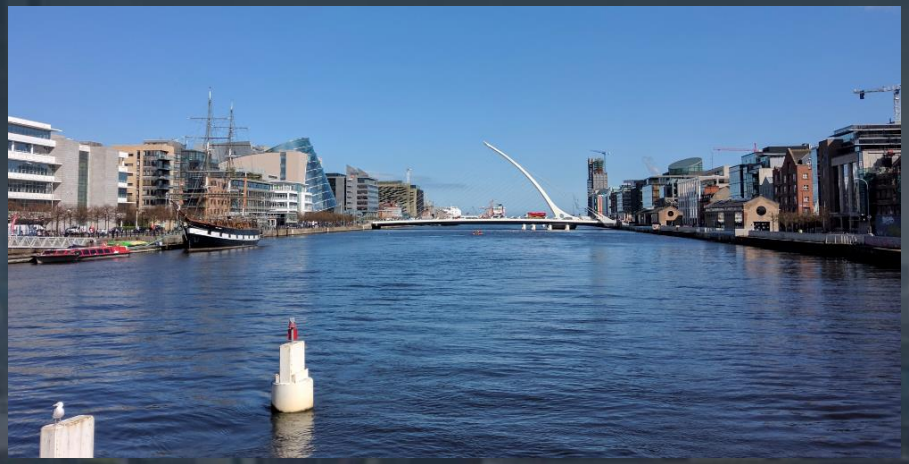
Lero THE IRISH SOFTWARE RESEARCH CENTRE
The Programmable City

Maynooth University
National University of Ireland Maynooth
Social Sciences Institute

European Research Council
Established by the European Commission

Summary of research

- Collaboration between **Programmable City** and **Lero** (Maynooth University)
- Aiding the creation of a **stakeholder network** for the Dublin Docklands smart district



- Comparative angle on **South Boston Waterfront** and the **Cork Docklands**
- Understanding how smart districts trial **new urban technologies** as a form of **smart urbanism**

Key findings

In Dublin, **two narratives** with differing outlooks

"SILICON DOCKS"

- Silicon Valley, US-driven vision of urban development supporting innovation
- Technology driven with focus on disruption, and creative destruction

"DUBLIN DOCKLANDS"

- emphasis on urban activation
- fostering of shared spaces for all communities

Stakeholders emphasised the need for a **vision, aligned timelines, and defined outcomes**. Clear **role of local government** of guidance and mediation

Key lessons

- Developing and articulating **a sense of place** (urban activation, **integrated planning of social and hard infrastructures**)
- **Cohesion with planning strategies**, including local area plans and city development plans (multiscale, learning from DDDA, DCC CDP, NSS/NPF)
- Fostering a **sense of inclusion** from the start by **including all relevant stakeholders**
- Ensuring the **municipalisation of data**, following the datafication of the city

Further reading

SmartIMPACT - http://urbact.eu/smartimpact

Heaphy, L., & Pétercsák, R. (2016). Building Smart City Partnerships in the 'Silicon Docks.' In *Creating Smart Cities*. Maynooth University, Ireland. Retrieved from http://progcity.maynoothuniversity.ie/2016/11/creating-smart-cities-workshop-videos-session-4/

Ryazanova, O., Pétercsák, R., Heaphy, L., Connolly, N., & Donnellan, B. (2016). Perception of Value in Public-Private Ecosystems: transforming the Dublin Docklands through smart technologies. In *"IoT & Smart City Challenges and Applications" – ISCA 2016* (pp. 1–10). Dublin. Retrieved from http://iot-smartcities.lero.ie/isca-2016/

Pétercsák, R., Maccani, G., Donnellan, B., Helfert, M., and Connolly, N. 2016. "Enabling Factors for Smart Cities: A Case Study," in *ICIS 2016 Research-in-Progress Papers*, Dublin, Ireland.

Heaphy, L. (2018). Interfaces and divisions in the Dublin Docklands "Smart District." SocArXiv. https://doi.org/10.17605/OSF.IO/Z2AFC

Work Environments

Leighton Evans

The Programmable City
progcity.maynoothuniversity.ie

Maynooth University
National University of Ireland Maynooth
Social Sciences Institute

erc
European Research Council
Established by the European Commission

SFI Science Foundation Ireland

Summary of research

- This case study focused on the use of software, and its algorithms and models, in the work of individual workers
- The focus was on system users and how software shapes their work and workplace
- Interviews with workers and observations conducted in a typical workplace site: a large retail space.
- A nine-week period between September and November 2015 at a large retail store operating in Ireland.
- Examining in detail how software alters the tasks, forms, spaces and scales of work.

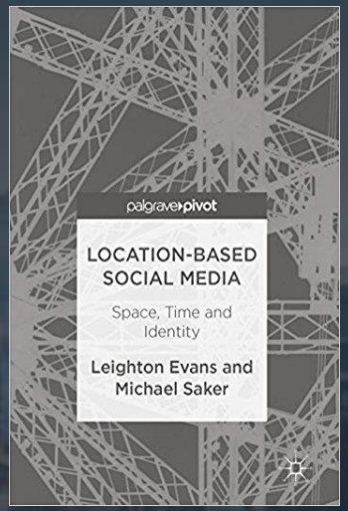
Key findings

- Big data systems were extensively deployed across retail work and these software and hardware assemblages have a significant impact on operations
- The spaces and practices of retail are pervasively mediated through computation
- Big data has introduced a regime of control - management of labour is concerned with data capture and analysis.
- Management of work is automated, mediated, monitored and regulated by code and data that saturates all tasks and sites of labour.
- Even where managers are still directly involved, their work is directed by a series of auto-generated KPIs and data-reactive work processes

Key lessons

- The regime of control is **highly precarious and fallible**, open to vertical and horizontal fissures that disrupt the various operations vital to the functioning of a store.
  - Tasks can become data-satisfying rather than operations- or customer-focused;
  - Symbolic labour vital to customer satisfaction is largely ignored;
  - Systemic system and equipment failures continually disrupt operations.
- Thanks to this, retail work involves a continual movement between a regime of control that seeks to harness automation, and a disciplinary regime that deals with the symbolic and interactive labour that acts as a reserve mode of governmentality when control fails.

L.Evans@swansea.ac.uk
@leightonevans
http://www.swansea.ac.uk/staff/arts-and-humanities/academic/evansl/



Evans, L. & Kitchin, R. (2018). A Smart Place to Work? Big Data Systems, Labour, Control and Modern Retail Stores. *New Technology, Work and Employment*, 33 (1), pp. 44-57. doi:10.1111/ntwe.12107

The Programmable City
progcity.maynoothuniversity.ie
Maynooth University
National University of Ireland Maynooth
Social Sciences Institute
erc
European Research Council
Established by the European Commission
SFI Science Foundation Ireland