

Digital reconfiguration in the retail sector

Investigators: Professor Michelle Lowe (SBS), Professor Neil Wrigley (Geography), Professor Les Carr (ECS), Dr Tom Wainwright (WSI Visiting Researcher)

The investigators are members of the WSI and the SBS Retail Business Engagement Practice and are seeking to develop novel research on the growing digital retail economy.

Project Summary: High street retailing has always been a competitive sector, where businesses have sought to innovate and introduce new technology. The last decade has seen the emergence of digital infomediaries, platforms which have become powerful actors in the reorganisation of digital retail, creating new markets for consumers, and novel opportunities for both large and smaller retailers, while introducing further competition and collecting more complex data from consumers. Digital infomediaries have become important actors in real-estate, food, fashion and consumer merchandise, providing platforms for 'traditional' and new retail businesses and reshaping business models, as retailers move away from physical stores towards online platforms, often driven by data and analytics.

There has been limited research into how web science and data, both open and proprietary, have reshaped retail markets and digital business models. In this context, this project seeks to scope out an 'evidence base' which tracks the reshaping of the digital economy's retail sector – creating a retail 'Web Observatory'. This evidence base and early analysis will be used to support future research into the development of (open) data driven and web science innovations which are fundamentally reshaping the retail sector.

Objective: To collect evidence on the emergence of new web infomediaries in two exemplary sectors. These are 'traditional' retail sectors that have been recently disrupted by digital infomediaries.

Budget:

- RA time – 0.2 FTE (one day / week) Level 4, spine point 28 from 1 Jan 2016 - 31 May 2016 (£2898.00)
- Interview, transcription and encoding (£1600)
- Business engagement development with retailers – train travel to London & subsistence – 5 x £100.00/pp - (£500)
- **Total £4998**

The project set out to develop:

- A Retail Web Observatory to capture contemporaneous and historic data on the emergence and restructuring of the retail digital economy
- A pilot study which explores the role of Web Science in the digital economy, using web analytics and interviews, to examine the rise of and disruptive roles of web intermediaries

- A research proposal for external funding
- Relationships with retail business partners to co-fund further research

Data collection and some initial findings:

During the research process, web data was scraped and collected to create the Web Observatory, covering changes in the travel, real-estate and food sectors. The data collected maps out key operators in these sectors, including platforms, digital incumbents and digital start-ups. The data covers the histories of mergers and acquisitions, stock prices, growth, app downloads, for example, to establish the magnitude of the sectors, key protagonist operation and sizes. In-depth analysis of key organizations is being undertaken to create case study examples which examine the histories, innovations and business models of notable organizations. The qualitative interviews have sought to examine the underlying industry trends and motivations that have shaped organizational behavior, but also the evolution of new incumbents and the role of new technologies. This insight has provided greater understanding into how organizations have managed the rise of infomediaries and the challenges developed by their pivotal role in the ecosystem. What is clear from the initial findings is that the role of platforms has had very different impacts across all 3 sectors, and they are continuing to evolve following different trajectories.

Travel: the rise of platforms in the travel sector is firmly established from the early 2000s. The market is continuing to change further with a fragmentation of the market, where consumers are absorbing more of the travel value chain, with providers being further fragmented through organizations such as Airbnb, while high value products are still provided by niche travel agents. Despite having the appearance of choice, many platforms have been purchased by larger platforms to seize digital footfall, with Expedia and Priceline acquiring competitors.

Real estate: the market has seen considerable qualitative disruption, from new digital start-ups using platforms, but the market is yet to be fully disrupted. Acquisitions by incumbents and potential weaknesses in online estate agent models, indicate that the technology being created by start-ups may be absorbed by incumbents seeking to offer consumers the best of both worlds. In contrast to the travel and food sectors, the three main platforms have developed a monopoly status. This sector has used data and platforms to create radical innovations for consumers.

Food: the platform participants are still numerous, although there are 3 leaders, with Uber soon to enter the market. Physical delivery limitations and the larger number of food suppliers leave a substantial market to still be covered, although the shift to delivery management by platforms requires substantial investment, making 2 of these platforms more competitive. Food suppliers have not been as innovative as real estate in their use of new technology to provide additional value to customers, but are able to increase their sales coverage area and income. Platforms are likely to see consolidation.

Additional funding:

A visiting researcher at WSI obtained a further £500 funding to extend the project and examine intermediaries in the food industry. This added an additional case study to the overall project.

Outputs and publications:

Web data observatory: A database of information on digital infomediaries has been developed, along with data on digital incumbents and new digital start-ups that function through intermediaries and platforms. This resource can be used to inform future grant applications and academic papers.

Digital leader networks: A network of CEOs and CTOs in high-growth technology companies has been developed. This will be crucial in gaining letters of support for research grant funding, and will also secure the research team with access to the digital-high street community to facilitate wide data collection.

Practitioner report: A report is currently being written which highlights the findings. This will be published and distributed to research participants to provide insight into the research, while also being relevant to others in the digital and high-street sectors. This report will widen the dissemination of the findings and will demonstrate the project team's capabilities to assist in securing a larger external research grant. This document will also assist in supporting the maintenance of relationships with key stakeholders in the digital and high-street economies.

Conference presentation: Initial results from the research project will be presented at the European Regional Studies Association in August 2016, in a special session on the digital economy and retail. Peer feedback will be used to develop further papers.

Peer-reviewed papers: It is anticipated that two academic journal papers will be completed using the qualitative and quantitative data collected in this project. These will be completed in the academic year 2016/17. The target journals include Journal of Economic Geography (ABS 4*) and the British Journal of Management (ABS 4*), reflecting the project team's interdisciplinary interests.

Future research plans:

Based on the connections developed with industry stakeholders and the successful collaboration of the interdisciplinary project team, it is planned that a research bid will be completed and submitted to the Newton or Leverhulme funds in 2016/17. This will involve colleagues from the Schools of Geography, Management and WSI at Southampton, and a colleague from Royal Holloway, University of London. This project will examine the internationalization of digital portals and platforms and their effects on the high-street. The findings of this substantial project will feed into a REF impact case study.