

### people & places in the 'digital economy'

those who develop & apply tech



and those that don't...



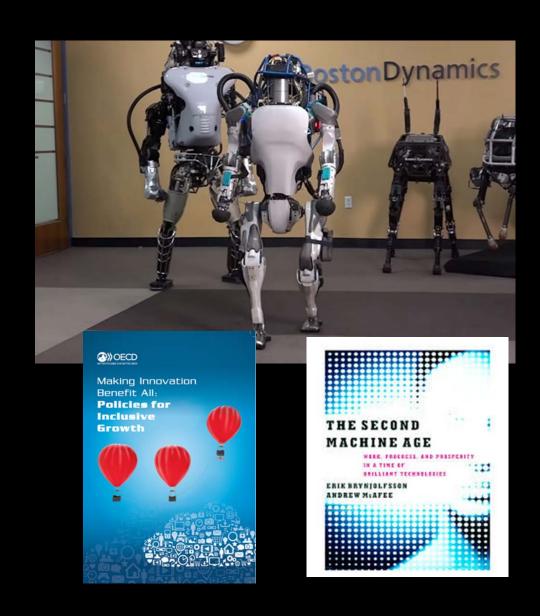
### the meta-debate...

"Big data, new algorithms, and cloud computing will change the nature of work and the structure of the economy. But the exact nature of that change will be determined by the social, political, and business choices we make."

Kenney and Zysman (2016)

**SO...** 

Will the 'digital economy' more deeply entrench 'digital divides' or - with intentional intervention - are more 'inclusive innovation' pathways possible?



# economic opportunity & the 'digital divide': 3 analytical entry points & 3 research questions

- 1. spatial: 'digital' transformation in mid-sized cities (Wolfe & Bramwell, 2008, 2016; Clarke & Gaile, 1998; Kodryzicki & Munoz, 2014; Erickcek & McKinney, 2006; Kotkin, 2003; Bell & Jayne, 2006; Markusen et al, 2008)
- 2. socio-technical: digital inequality & work
  - skills & tech career pathways (Lowe, 2008; Chapple, 2006; Giloth, 2004; OECD, 2017)
  - entrepreneurship (Porter, 1997; Kauffman, 2016, OECD, 2017)
  - maker/hacker spaces (Vinodrai, CDO; Wolfe-Powers, 2016)
- 3. institutional: policy & local

**governance** (Bradford & Bramwell, 2014; Benner & Pastor, 2015; Savitch & Kantor, 2002; Rodriguez-Pose, 2013; Gertler, 2013; Harrison & Glasmeier, 1997)

- 1. Creating digital opportunity? (tech-based innovation or conventional attraction strategies?)
- 2. Expanding digital opportunity? (development from within or attraction from elsewhere?)
- 3. Governing digital opportunity? (leverage policy & coordinate local efforts or fragmentation & competition?)

# institutions & 'inclusive innovation': 3 theoretical frames

resilience & regional innovation - incidental inclusion

**PREDICT?** networked & engaged business community leads transformation

collaborative governance & planning - intentional inclusion

**PREDICT?** inclusive planning shapes equitable outcomes

urban political economy & governance - negotiated inclusion

PREDICT? fragmented power; 'weak market' cities not progressive, 'eds & meds' default

## research design

- 2 independent variables: federal & state/provincial policies; local governance
- 2 dependent variables: digital innovation (TBED); inclusion (skills & start-ups)

## & methodology

- 6 case studies: 2 each in Canada, the US, & France
- control for size (250,000 500,000), location, economic specialization
- 25-30 interviews in each case: public, post-secondary, non-profits & private

# 2 archetypal 'ordinary' cities

Greensboro, NC, p. 280,000



"pleasantly mediocre"

(McKinsey, 2002; "the wrong kind of social capital" (Florida, 2002);

"Greensboring" (me)

London, ON, p. 380,000



"ordinary city at a crossroads" (Bradford, 2016); "white, right, and polite" (me & anyone else who grew up there...)

### 1. Creating Digital Opportunity?

### tech-based economic transformation

#### **GREENSBORO**

nanotech...who knew?



#### **BUT**

- R&D but no anchor firms
- few tech start-ups, weak networks
- ec dev collaborative but not innovation focused

#### **LONDON**

'creative digital' of "300+" established firms...?





#### **BUT**

- anchor firms but no R&D
- diverse sector, weak networks
- ec dev innovation focused but not collaborative

# 2. Expanding Digital Opportunity? human capital development from within...

#### **GREENSBORO**



"purposefully engaging under-connected populations - college students, people of color, immigrants, millennials, retirees, scientists, artists & academic inventors - to create a design destination that ... establishes Greensboro as an epicenter for inclusive innovation"

**The Personal Navigator &** 

**Union Square Campus Phase 2** 

#### LONDON

"It's very polarized in London. People are either doing extremely well or extremely not well. To me, that's where that digital divide is." (confidential interview).

- uneven access in schools
- WFD & immigrant orgs disconnected from digital
- non-tech start-ups defunded

### 3. Governing Digital Opportunity?

policy, governance & 'inclusive innovation'

#### **GREENSBORO**

- passive fed/state policy role (grants); HB2 (!?!)
- multiple foundations & civic leadership 'tables'
- engaged universities
- collaborative economic development orgs
- multiple investments, 'small bets'

#### **BUT**

- corporate leadership absent
- local govt & innovation agenda disconnected
- minority leadership under-represented
- weak collective identity/vision
- fragmentation & one-off projects
- no formal strategic plan

#### LONDON

- fed, provincial & municipal ed dev/innovation policy (funded programs)
- activist local govt and non-profit civic leadership
- London Plan & Community and Economic Roadmap

#### **BUT**

- corporate leadership absent
- university disengaged
- parochialism (& racism!)
- weak collective identity/vision
- competitive economic development orgs
- formal strategic plans but contested

### 3 theoretical frames re-visited

"these are not [yet] 'success' stories" (Clarke & Gaile, 1998)

regional innovation?

inter-firm networks are weak & business leadership absent; firms alone won't drive transformation BUT beyond 'eds & meds', digital innovation in both cases

collaborative governance & planning?

even "meaningful" inclusion no guarantee; policy can also encourage competition

BUT civic leadership & multi-actor governance important drivers & intentional inclusion evident in one case

urban politics?

power, participation & interests shape urban development agendas;

regional innovation & collaborative planning "will fail without attention to local politics" (Giloth, 2004)

## key takeaways (so far)...

- 'inclusive innovation' in the digital economy? digital innovation underway but digital inclusion remains a work in progress
- size matters: mid-sized cities face different challenges (Wolfe, 2009; Wolfe & Bramwell, 2008, 2016)
- local capacity matters: shifting roles of local actors and governance dynamics (Hanson et al.; Bramwell & Pierre, 2016; Clarke, 2016; Gross, 2016; Stoker et al. 2016)
- policy matters: innovation policy mix needs to be sensitive to local capacity and have inclusion components (Todtling & Trippl, 2008; Bramwell, 2012; Bradford, 2016)

	Greensboro	London
Creating?	NANOTECH collaborative ec dev orgs but not tech focused	'CREATIVE DIGITAL' competitive tech-focused ec dev orgs
Expanding?	InnovateGSO	not much
Governing?	civic leadership & multiple investments BUT weak local democracy & no strategic plan	activist local govt & strategic plans BUT divided electorate & contested plan
	DIFFUSE	DISCONNECTED