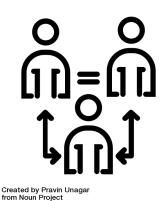


SESSION 1: December 10, 2019

1. Collaborative Connections

PRESENTED BY: ALASTAIR CHENG

Working across state and organizational borders keeps getting easier.



Billions of people own devices that would have been supercomputers, not long ago. They use tools like 5G and Skype to connect, Salesforce and G Suite to coordinate, and Upwork to hire. Working across state and organizational borders keeps getting easier. It is possible to work with anyone, from anywhere — or break traditional jobs into subcontracted tasks. The result has reshaped everyday work. People spend their days

on chat and teleconferences with a remote team of co-workers, freelancers and service providers.

Category: Tech

Illustrative Fact: Cisco predicts there will be 4.8 billion internet users by 2022, up 1.4 billion since 2017.

Microwork Connection: This speedy connection growth — including many in the Global South, from metropolitan centres to subsistence farming communities and even refugee camps — has been critical to microwork's

rise. At the same time, increasingly sophisticated systems let non-expert crowds succeed at tasks from technical manual creation to neuron-mapping.

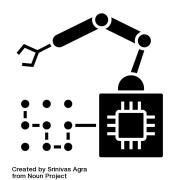
TO Connection: All this might give the GTA's diverse, internationally connected population an edge as microwork requesters, or help them sell their skills into global markets.

Reversal Description: But there's no guarantee such collaborative horizons will keep expanding. Factors from regional economic/political tensions and data security concerns to broader employment protections, for instance, could all increase barriers to working across jurisdictional and organizational borders. (See the recent controversies over Huawei, for instance, and Chinese government order a few days back that all western computer systems be removed from state offices in the coming years.)

2. Intelligent Advances

PRESENTED BY: MAGGIE GREYSON

We're training computers to do human work, but cheaper and better.



Computer algorithms connect you with a ride, translate your news, and analyse your medical tests. Sensors, robotics and AR (augmented reality) are becoming part of our everyday lives. But these systems depend on "human intelligence tasks" (HITS). Microtaskers fulfil invisible but essential HITS around the clock and the globe. Their activities also "train" computers to take on ever more complex

work. Toronto's profile as a tech hub is bringing high-paying jobs such as data scientists. These are people who build and support the tech-based systems that are doing human work. Together, data scientists and microtaskers are training computers to do human work, but cheaper and better.

Category: Tech

Illustrative Fact: In 2018 alone, AI systems matched (or bested) humans at tasks from Chinese-English news translation to cancer biopsy assessment.

Microwork Connection: Paradoxically, such developments have also driven recent growth in low-skill microwork. Building the datasets needed to train AI often require tasks like image-tagging at massive scale, while the ongoing need for human judgement in "automation's last mile" means hundreds of thousands already contribute invisibly to products including social networks (content moderation) and search engines (result evaluation). Sensors, robotics and AR tech have also begun moving similar automation into the offline world.

TO Connection: All this shapes the tasks Toronto microworkers receive, which have in turn been vital to projects supporting the city's recent Al boom.

Reversal Description: But despite widespread hype and fear, these technologies may well not dramatically change GTA working life in the next decade. As yet, skeptics argue, digital progress hasn't yet produced anything like the productivity gains previous advances achieved earlier last century. Beyond possible unforeseen technical challenges, anything from market concentration and rising inequality to AI safety concerns might brake innovation, even as social factors like labour regulation could shift how new technology is deployed.

3. Built for Profit

PRESENTED BY: CHERYL MAY

Companies maximize profit by reducing costs.

Most businesses put efficiently maximizing profit over anything else.

Companies maximize profit by reducing costs. Automation is one way to increase productivity and reduce costs. Outsourcing is another. Moving jobs to where the cost of doing business is lower increases profits. Companies can realize gains by taking advantage of labour's low cost and bargaining power

in poorer countries. Furthermore, they can transfer capital costs to workers and bypass employment standards.

Category: Economic



Created by TukTuk Design from Noun Project

Illustrative Fact: On Mechanical Turk the median hourly wage is USD ~2 per hour, and only 4% of workers earn more than USD 7.25 per hour. In 2012, Crowdflower (now Figure Eight) was sued over its labor practices. In 2015, CrowdFlower paid USD 585,507 to settle but the employment status of its workers was unanswered.

Microwork Connection: Microwork opportunities and conditions reflect these same dynamics, often to

extremes: platforms are engineered to avoid standard employer obligations, market asymmetries mean workers have near-zero recourse or negotiating power, and vast supplier competition pull pay and pace towards developing-country rates.

TO Connection: Ultimately, the very flexibility and affordability that make microwork indispensable to many tech companies in hubs like Toronto also means it's nearly impossible for residents to earn a living wage on platforms like MTurk.

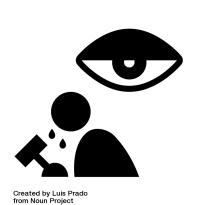
Reversal Description: Nevertheless, some businesses are broadening their measures of success, whether because of cultural or legislative incentives. This can mean simply taking a longer view of profitability (e.g. prioritizing worker health & retention) or embracing the "triple bottom line" of many benefit corporations and social enterprises — including several microwork platforms, such as Samasource.

4. Social modernization

PRESENTED BY ANA MATIC

Alternate ways of living and earning are gaining social acceptance.

1950s ideas about gender, family, identity, and values are fading. Alternate ways of living and earning are gaining social acceptance. Furthermore, many Canadians seek a work and life balance, which is a highly individualized notion. Employers and microwork platforms promote entrepreneurship and



flexibility and question the notion of who an employee is. The message of autonomy resonates with many. For some, the notion of work and life balance, of being your own boss, doesn't quite live up to the promise. The reality is that the microtasking workforce is geographically scattered and demographically diverse. As a result, it is difficult for microworkers to influence pay or terms of work.

Category: Values

Illustrative Fact: Leading organizations increasingly recognize the importance of flexibility. The Globe and Mail Report "Diversity in the workplace starts with flexibility" features an HR leader from Cisco - who states that "employees know that embracing who they are in their full form is important to us".

Microwork Connection: Reducing social inclusion gaps give rise to increased cognitive diversity which enables enhanced microwork initiatives.

TO Connection: A recent <u>Toronto Star report</u> cites StatCan data which shows that the gender wage gap has narrowed to 13.3% - where women have "surpassed men in educational attainment, diversified their fields of study at post-secondary institutions, and increased their representation in higher-status occupations."

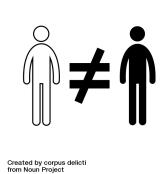
Reversal Description: Recent political gains by populist social conservatives and economic nationalists across the OECD suggest traditional norms' decline is hardly inevitable. But microwork also has proven appeal in more traditional milieus, from Utah to Uttar Pradesh, as a "respectable" (or simply

safer) source of income for people cultural or legal barriers leave at a local earning disadvantage.

5. Uneven Growth

PRESENTED BY GORAN MATIC

Toronto keeps booming, but not everyone benefits.



Job and population growth mean that Toronto is more diverse, younger, richer and bigger than any other region in Ontario. But Canada's wealthiest city an unaffordable "hourglass." As elite workers thrive, Toronto's socioeconomic middle is shrinking. On many measures, this city has the largest gap between rich and poor in Canada. Furthermore, income inequality disproportionately impacts people who are racialized. Toronto keeps booming,

but not everyone benefits.

Category: Economic / Social

Illustrative Fact: A 2017 report by the <u>United Way and U of T researchers</u> reveals that while "Toronto is fast becoming a world leader in innovation and an example of thriving multiculturalism" it's growing prosperity also results in "a widening gap between the city's richest and poorest residents". The report observes that the "income disparity means middle-income neighbourhoods in the region are disappearing", and are increasingly "replaced with high and low-income neighbourhoods." In 1980, "there were five very low-income neighbourhoods in Toronto" - while, in 2015, "the number grew to 88." In the same period, "the number of highest earners more than doubled."

Microwork Connection: Growing income disparity is likely to push more people into considering microwork options for enhancing their income.

TO Connection: Toronto is currently assessed as having the "largest gap between rich and poor residents compared to other Canadian metropolitan areas." A <u>Toronto Star analysis</u> examines data from Statistics Canada which shows that "income mobility has stagnated over the past decade" - where, in the late 1980s, "almost 73 per cent of the bottom 10 per cent of wage earners would move up a rung on the ladder over five years. Nowadays, it's about 62 per cent."

Reversal Description: Income inequalities and the effect they have on the health of communities is correlated to the increases in social inequalities and phenomena such as rising gun crime. A focus on <u>healthy neighbourhoods</u> introduces policy decisions to tame the <u>underlying causes</u> of uneven growth, enabling a resurgence of richly diverse and resilient neighbourhoods.

6. Policy (and Regulatory) Lag

PRESENTED BY MARCO CAMPANA

Technological shifts have outpaced government policies.



Microtasking is under the radar in Ontario, and so unregulated. Technological shifts have outpaced government policies. As a result, platforms and requesters press their advantages, creating a buyers' market. Left unregulated, the potential ramifications are broad. The most obvious consideration is adherence to provincial employment standards. The impact extends to the corporate tax base. Without adequate resources,

local prosperity and community safety slide downward. Furthermore, as the social safety net erodes, the need for stable jobs and decent pay rises.

Category: Politics

Illustrative Fact: [TK]

Microwork Connection: [See above]

TO Connection: [Probably useful to flag some of the recent legislative shifts in Ontario somewhere here?]

Reversal Description: Suspicion of *laissez-faire* tech policy is rising across the political spectrum, though, fuelling enthusiasm for reform. And should the state reassert itself, microwork-affecting possibilities range from mandatory platform transparency to increased contractor protections and bargaining power, portable benefits, public microworks or job/income guarantees.