What is the Purpose of this Challenge Paper?

- Our table's goal will be to be as ambitious as possible in brainstorming opportunities to improve lives by creating technology platforms **as public goods**. At Social Capital Partners (my firm) we've started calling these "Platforms for the People." Our secondary goal will be to think through how these could be designed and implemented.

- This paper will outline my view of this topic and will suggest a few possible platforms that could be created. Please view the content very much as one person's perspective, and as a challenge. It is a limited-research opinion about a big topic and is intended to drive an open-minded discussion.

- If this paper is successful, it will have our table's participants thinking about options for building new platforms prior to the event in order to create the richest possible discussion on Nov 14. Please comment if it is not meeting that objective, and I will work to address these issues and adapt the topic to ensure we all feel satisfied with the great effort we are making to attend.

Initial Context and the Key Challenges to be Addressed

Systemic problem: how we think about technological innovation as it relates social challenges.

- We tend to think of global digital technology platforms as for-profit organizations, funded by venture capital, developed according to principles perfected in Silicon Valley. Google, Facebook, Uber, Alibaba, Amazon, etc.
- We also mostly try to solve social and public policy challenges in a jurisdictional way. Municipal, Provincial/State, National. Malaysia created their own freelance work platform. Toronto manages its transportation challenges (for now). Nova Scotia has its own health care system.
- Where governments have tried to build useful technology, they have often failed (at least initially). In many cases that failure has been very public. E-health in Ontario, payroll systems in Canada and France, healthcare.gov in the US, UK's attempt to digitize the NHS.
- Our challenges are similar in different countries, as has largely been true in the past. *What's different is that digital technology should enable us to act collectively to address at least some of these.*

Some key questions and thought-starters**:**

- In an age where the power of global platforms has been pretty clearly demonstrated, is there an opportunity to elevate some of our public policy challenges to a supra-national level, and approach them with the same global ambition as massive technology companies do? Would that allow for better answers?
- If we thought about technology platforms as fundamental infrastructure, designed to enable a better society, in the same way we think about roads, sewers and public schools, how would that change the way we invested in technology? What ideas might that generate?
- Envision this scenario: three co-founders, one is an expert in data regulation, one is an experienced public servant and one has built and exited a few technology platform companies. If you gave them $1B and the mandate to build a new platform in the public interest, with full government support and enough oversight to protect people's data, what could they build?

It's also useful to ask: what if we don't do anything? What if we continue to think of platforms as things to regulate or break-up, rather than maps to what's possible?

For many, there's a sense that the future is happening *to* us, and there's nothing we can do about it. Technology, and the companies that dominate it, has become a mysterious threat that will take our jobs, profit from our information and, possibly, build robots to kill us when we're no longer helpful. The government complains, but appears powerless and without ideas. If nothing changes, and people don't start seeing digital

technology as potentially helpful, will people continue to accept our current system as acceptable?

Question for discussion prior to Nov 14th that I need help with: Is the "tech for good" movement, and organizations like the Open Data Institute, Mozilla, OpenAI, doteveryone, etc. likely to address these issues? I'm asking this quite honestly, as the question this challenge paper asks is whether we've fully explored the *new* public goods or services that could be created using technology. Are our current efforts to make technology serve humanity considering the whole solution set, if we removed all constraints (funding, talent, jurisdictions, etc.)?

The Sponsor of this Paper and some context for the discussion

- Jon Shell is Managing Director and Partner of Social Capital Partners (SCP), a Canadian non-profit founded in 2001 by entrepreneur and philanthropist Bill Young. With a team largely drawn from the private sector, SCP's goal is to introduce scalable market-based initiatives to address social challenges. Jon joined SCP in 2017 after a 20-year career in the private sector. A life-long entrepreneur, he has founded and grown successful (non-tech) companies in both Canada and Australia. In between ventures Jon was a consultant with both McKinsey & Company and Monitor. He received a BA from Queen's University and an MBA from the Richard Ivey School of Business at Western University.
- A reasonable person reading this might ask: why is a non-tech person with an employment and training background hosting a table on technology and society? Great question! Here, briefly, is why SCP is preoccupied with this:
  - With our traditional focus on employment and training, we're very concerned about how we'll adapt as a society as work changes
  - We mapped the employment and training system and found a lot of promising enterprises and projects that would help people as work changes. But they are small and disconnected and lack a digital platform and infrastructure to connect them and make them useful to clients.
  - At the same time, due to our connections in government we knew that they were actively considering partnerships with for-profit companies with sub-optimal systems which would create massive data privacy and social efficacy challenges for years to come. E.g., partnerships between LinkedIn and provincial employment and training systems.
  - We came to understand that government did not feel they had practical alternatives for modernizing the system, and felt pressure to act.
  - We felt given the urgency of the issue, it was worth trying to develop one
  - Thinking through all the challenges government would face in building or funding an alternative approach, we framed the challenge similar to building the Space Station. A platform to address a problem common to many countries could be addressed with an ambitious cooperative approach like the International Space Station, where a very useful public good was created. The result of that exploration is the "International Space Station for Work" (ISSW) concept detailed on the next page.
- Briefly, the idea is for several countries to fund an independent non-profit company to build the infrastructure that would underpin and link a next-generation employment and training system. A system with open standards that would protect people's data while allowing the useful employment tools being built by entrepreneurs and governments to link to each other.
- We've had great response to this idea so far, and want to engage this table in an exploration of whether this approach to creating the ISSW applies to other social challenges.

- As your table host, I recognize my own limitations when it comes to technology. If all goes well, these general concepts can be informed through this group with real knowledge, and something good will come out the other end!

Brief description of the International Space Station for Work, excerpted from a forthcoming paper:

"Governments in Canada and around the globe are struggling to incorporate modern technology into their employment and training systems. As fears of automation increase, and businesses struggle to close widening skills gaps, pressure is building on policymakers to find ways to adapt to a changing landscape.

The current tendency in Canada is either to partner with private sector companies like LinkedIn, or to fund incubators hoping that solutions will develop from the ground up. These responses are inadequate for the task, fail to take advantage of the opportunities offered by new technology, and in some cases may put personal data at risk.

We must think bigger.

We should take inspiration from projects of the past, like the International Space Station, where countries facing a common challenge worked together to build a transformational solution. An approach which uses the resources of governments, but is built and managed like a modern technology company, could create an enabling infrastructure which changes the game for jobseekers, employment advisors, and businesses."

The full document is available to anyone on request, with the understanding that it's still in draft form.

Initial attempt to outline use cases for "Platforms for the People"

As a stake in the ground, here are a few ideas of how we might identify a good use case for a platform as a public good:

- Where technology might improve our ability to address long-standing challenges, but there is no clear business case for a private sector solution. Or, the current leading private sector solutions are inadequate with no clear roadmap to a compelling solution. (I.e. stepping in where the market doesn't work effectively, which is a traditional role for government)
- Where the current approach to business model development (incubate several solutions and let the market decide the best one) isn't practical due to the requirement for scale, or would take too long to address an urgent need.
- Where the private data gathered in providing a solution is difficult to protect and regulate, and providing the solution as a public good would enhance our ability to protect data without affecting the solution.
- Where the current private sector solution creates a market that lowers the income of individuals without a unique consumer value proposition.

These are a few ideas for context, and certainly are not meant to bound the discussion. They may be right or wrong and are certainly incomplete, but may prompt interesting ideas.

A few discussion-starter ideas based on this set of criteria

Ideally, this will be where we spend the bulk of our time in our session. Here are a few ideas of potential platforms to stimulate discussion:

- **Ride Sharing**

  One of the main characters in the Future of Work debate is "The Uber Driver." There's lots of handwringing about how bad this job is and little people get paid. Well, what if we could instantly pay them 33% more? Without charging riders more? We can. Uber, Lyft, Grab – they're just apps. In Denver, the Green Taxi Co-operative, which is just an app owned by the drivers, controls a large share of the market. So what if Canada, France and the UK got together to build a really good ride-sharing app? And let people use it for free? That's a market half the size of the US. Without affecting the market price for ride-sharing, you'd instantly shift significant wealth to some of the most vulnerable in society, at a cost far lower than the social services we likely currently provide.

  More critical here is the future of transportation. Ride sharing companies, and their investors, openly talk about wanting to become the end-to-end provider of transportation services in the future, connecting cars, bikes, scooters and public transit. Is that a future that's beneficial for people who depend on public transit? Is mobility a social good that should be "privatized," likely to companies based in, and funded from, only a few global locations? How much will the specific needs of Regina and Cleveland and Nairobi be accommodated in such a system? Instead, should we be playing a greater role in building a new system that improves mobility for those who need it most, as public transit is intended to do?

  The evolution of peer-to-peer markets is explored by the Open Data Initiative: https://theodi.org/project/research-and-development-peer-to-peer-accommodation/

- **City Building**

  In Toronto we are right now engaged in a fierce debate over Waterfront Toronto's potential partnership with Sidewalk Labs, an Alphabet subsidiary. The project is designed to build an enhanced neighbourhood on Toronto's waterfront making full use of digital technology. At issue is how to manage the data, information and insights produced in the effort, as well as the return Sidewalk is likely to get for their investment. Is this the right type of public/private partnership for understanding how to incorporate technology successfully into cities? Or should a number of countries partner to make the investment, attract the talent and build a project like this? Does Google bring something to the table that couldn't be achieved otherwise? If data were protected and the output were a public good shared by municipal governments and entrepreneurs all over the world, wouldn't that be a better return on the investment?

  It's an idea explored at the Mozilla Festival in London in October:

  https://ti.to/Mozilla/mozfesthouse-Neighborhoods

- **Education**

  Historically, education has been jurisdiction-specific, both for cultural reasons and the requirement to have an actual built infrastructure to house students and educators. Technology obviously opens up education to global providers. Are the current platforms providing a good service? Are there solutions that would benefit from scale and be helpful but don't have a clear business case?

- **Identity**

  Your host knows next-to-nothing about the potential approaches to protecting and managing identity through blockchain and other technology, but knows enough to know they exist. It's currently an area of significant effort.

Clearly there are many possibilities here, and there are major challenges with each one. The question to answer is: are there enough compelling and powerful ideas to make it worth figuring out a real approach to building platforms for the people?

Assumptions

A few more "stakes in the ground" assumptions that are wide-open to debate.

- These large scale challenges shouldn't be approached with a "pilot project" mindset. Like a "Google moonshot" approach, they should have access to adequate funding to attract the right talent and build to appropriate scale. That funding should be secure, and shouldn't be exposed to the political demands of annual budgeting. To date, government funded pilot-project approaches have not led to much meaningful change
- "Platforms for the People" requires that, if the projects are designed properly and fully funded, the best technology talent would choose to work on them. It assumes there is a strong supply of technology leaders who are either more interested in pursuing important problems than financial reward, or have already amassed sufficient wealth to make financial rewards less relevant.
- An international approach will often make sense. The rationale behind approaching it this way is several-fold. It would improve the ability to succeed given more access to data, greater prestige to attract better talent and easier to fund due to smaller commitments for each country. It would provide the scale to compete with global technology companies. And it would remove the effort from the day-to-day partisan debates in any one country. This isn't to say its impossible to successfully pursue these as nations. Singapore, Estonia, Finland and the UK, among others, are currently pursuing things that might qualify as "platforms for the people." The contention here is that, for areas of common interest, the result would be better with a collective approach. Selfishly, as a Canadian, I also know its our only path to being part of the best answers.
- Approaching our collective challenges with an independently governed, multi-national approach has been the chosen path before. CERN, the International Space Station and ITER are a few examples. In these areas the benefits of scale and independence were deemed more important than national control. These facts are also true for some of the challenges that digital infrastructure could address.
- "Platforms for the People" could be seen as a "tech will save humanity" approach, but it needs to be seen as an enabler for human action. This often comes up with digital technology ideas - we worry about them more than other technologies. Medical technology, combined with doctors, isn't something we object to. Airplanes are a technology that's been helpful, as is plumbing. Is the issue that we haven't yet mapped out the right partnership between humanity and technology when it comes to digital technology? Certainly as we thought about the employment and training system, one of our main considerations was how will this be used by employment advisors in the field, who will remain critical actors in helping people find work.
- We could develop a light-touch governance model that still ensures data security, interoperability and open standards. This is for discussion, but necessary if any of these are to be politically acceptable and also not weighed down by bureaucracy.

What are the Expected Outcomes From This Conversation, and from Our Day Together?

Ideally our day will involve thinking ambitiously about digital technology as infrastructure for the public good. There are various potential outcomes of this, but here are a few that would be helpful:

- Identification of some credible potential "Platforms for the People"
- A map of how to build one or two possible platforms as a result of a deeper, focused discussion of the highest potential opportunities
- Development of a framework for a new, more ambitious tool for the "tech for good" movement
- An outline of the technological considerations in building a platform in this way
- A framework of how to identify and analyze a potential platform: the types of things that should qualify, why, and how you'd organize around it.
- Development of a small group of people interested in the concepts discussed, and willing to invest in a longer and broader discussion about how to make one of these real.

Open question for the table: Are any of these more or less interesting to you as participants? Are there other things you'd like to achieve?

Some comments from others for those who still want to read more!

The sponsor recognizes the long and winding road this challenge paper has taken. So, to finish a couple of thoughts from others.

At the end of a well-regarding blog detailing the potential for a destructive period of global competition for leadership in AI, Ian Hogarth includes a couple of ideas regarding international cooperation on technology:

"Personally, I believe that AI should become a global public good--like GPS, HTTP, TCP/IP, or the English language--and the best long term structure for bringing this to fruition is a non-profit, global organisation with governance mechanics that reflect the interests of all countries and people. The best shorthand I have for this is some kind of cross between Wikipedia, and The UN."

"During the coming phase of AI Nationalism that this essay predicts, I believe we need a simultaneous investment in organisations and technologies that can counterbalance this trend and drive an international rather than national agenda. Something analogous to The Baruch Plan led by organisations like DeepMind and OpenAI."

Paul Duan is founder of Bayes Impact, a French non-profit company designed to use data science in the public interest. He wrote a paper called "The Citizen-Led Public Service" in which he called for a new partnership between entrepreneurs focused on the public good and government.

His proposal (translated from French) "combines the forces of innovation with those of the state in an unprecedented alliance. This alliance must lift the obstacles that cause technological innovation to benefit private interests far more easily than the common good. In other words, this way offers citizens the means to respond to the needs of society while guaranteeing respect for the values and principles, albeit adapted to the digital world, of public service."

Finally, I particularly liked a recent Medium post by Irina Bolychevsky on the topic of Tim Berners-Lee's new initiative.

"It's time to challenge the standard economic approach when it comes to digital. The economies of scale are fundamentally different and we need bold new frameworks to ensure that technology benefits and protects everyone in society. Governments could and should invest in open infrastructure so that the basics of communicating online or connecting with people, cannot be 'owned' by companies, but is a shared basis like the internet or email protocol.

I'm thrilled Tim is pushing forward with Solid, but we need to be thinking bigger. Let's start tackling the broader challenges and opportunities for a decentralised web to deliver a better ecosystem for all. Solid and similar projects need user research, user centered design, marketing and coordination to ensure interoperability and a user experience that

can compete with the status quo. Common authentication and authorisation standards for digital identity and login and communication standards that work across applications and services will help break down silos and create real benefits to users and companies to motivate the move away from digital monopolies. It's time to push for serious funding and resources into such public infrastructure to create an internet and web that works for everyone, just like Tim's original vision."

https://medium.com/@shevski/how-solid-is-tims-plan-to-redecentralize-the-web-b163ba78e835