Data Strategy Town Hall Report

(Preliminary draft, v0.2)

Executive summary

Western needs, and is ready for, an aggressive data strategy.

The corporate university recognizes significant opportunities for increased efficiencies, novel and better services, and improved co-operation. Our students demand the data acumen to be effective 21st century citizens. Our faculty, and trainee researchers, see a future in which the ability to make sense of ever-increasing data streams is an essential element of their intellectual survival.

Common to the related, but distinct, goals of these constituencies is a core set of shared needs. Foremost amongst these is the need for accessible training and support.

We live at a moment where the "can" of data analysis has moved, sometimes alarmingly, past the "should". Our community expects a clear articulation of our shared values and an ecosystem – from basic training, to applied in-house analytics – rooted in an ethical foundation.

Process

"My hope is for adoption across campus, implemented by fully empowered people."

> Anonymous town hall participant

One hundred and eighty three faculty and staff registered for a town hall to gather early input in the context of a user-centred design approach to developing an institutional data strategy. The goal was to begin engaging the *empathize* and *define* stages of the classical design thinking process. We opened with each participant contributing a single word to finish the sentence "When I think of data, I think of...":



Participants were a relatively equal split of staff and faculty, biased (unsurprisingly) towards those with greater experience in data methodologies; a chart of the self-reported level of data proficiency of the participants is given in Figure 1.

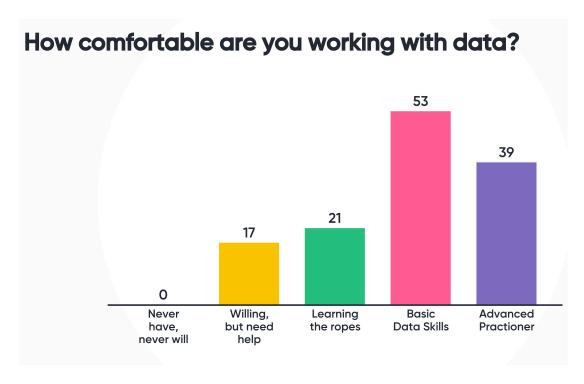


Figure 1: Self-reported proficiency level

Hopes & Fears

"My hope is for a data strategy that empowers people and creates value for 'us'."

> Anonymous town hall participant

Participants were invited to share, in free-form text, their hopes, and fears, for a future data strategy. 512 distinct submissions were received and coded using an open-ended, data-driven, approach. Comments receiving identical codes were clustered and are reported only once below, but no saturation threshold was applied and all submitted hopes and fears are meant to be reflected in these lists.

Hopes

- Aggressive experimentation, creation, and "breaking old rules".
- Data literate graduates.
- Centralization of data.
- Strong governance, but with a "breaking down of silos".
- Learning from past efforts (both successful and not).
- Data-driven decision making and efficiencies.
- Data for social good.
- A clear strategy, with tactical short-term deliverables.
- More dedicated data scientists on campus.
- Inclusion of the arts, humanities & social sciences.
- Western recognized as leaders.
- Accessibility.
- Data ethics were throughout our intiatives.
- A transparent, co-ordinated, collaborative and consultative approach. A voice for all stakeholders.
- Pursuit of new, data-driven, revenue streams.
- Information security.
- User-centred design.

- Nimbleness. Specialized initiatives and support.
- Appropriate funding and staffing.
- Engaged leaders and champions.
- Access to training for all community members. Teaching and training as an integrated component.
- Enabling cutting-edge, and collaborative, research.
- A commitment to open data.
- Global and private sector linkages.
- Centrally-supported tools and platforms.
- Clear articulation of data ownership

Fears

- Breaches, failures of security, the release of sensitive and/or personal information.
- "1984". Loss of privacy. Dehumanization. Surveillance of students and staff.
- Purposeless collection of data.
- Failure to co-operate and share data. Data accessible only to a "data aristoc-racy".
- Failure to think big enough, and move quickly enough. Being left behind.
- Insufficient investment in retaining and recruiting staff and faculty experts / thought leaders.
- Lack of transparency in data collection and use. Failure to address algorithmic bias. Inappropriate use of data. "numbers driving all decisions" and "becoming slaves to the data".
- Lack of consultation, co-operation, commitment and buy-in. "We will fall behind. Remain in silos. Accomplish nothing."
- Increased bureaucracy.
- Inflexible implementation.
- Lack of training, lack of knowledge. Leading to both loss of competitiveness and poor decision-making.
- Widening gulf between experts and users. Ghettoization of some units and disciplines. Lack of inclusion. Power differentials.

- Paralysis by overload. Too much information, not enough decision-making.
- Rigid strategy that cannot adapt to an evolving landscape.
- "Throwing out the baby with the bathwater" failing to recognize and support existing bright spots.
- Lack of interest.
- Internal competition to "own" fields like data science, instead of collaboration.
- Too much sensitive information shared with preferred vendors. Lack of commitment to open alternatives.
- Cost.
- Marginalization of non-quantitative disciplines.

Aspirations

"We need to develop a culture of collaboration and respect between data generators and data analysts."

Anonymous town hall participant

Participants were asked to report their relative interest in four key categories of aspiration. The results of this poll are reported in Figure 2. Almost all participants seek the ability to better apply data tools and methods to their own work; surprisingly, fewer are interested in social implications.

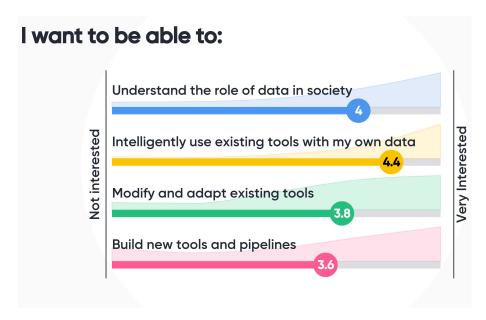


Figure 2: I want to be able to...

Needs identification

"We need... an action-oriented data culture."

Anonymous town hall participant

We asked "What is Western's greatest need in AI & Data?". The participants self-assembled into small groups and tackled the question collectively using the KJ method¹. Needs clusters were reported back by participants and metaclustered by the facilitator. A strong set of twelve consensus needs emerged:

- 1. Ethics, values, and trust (in algorithms, in policies, and in people).
- 2. A clearly articulated shared vision.
- 3. A tractable strategy, with a tangible implementation plan, developed via a transparent, collective, process.
- 4. Training for students, staff, and faculty.
- 5. Institutional commitment, a legion of champions, and engaged leadership.
- 6. Resources: funding (external and internal), investment, and infrastructure
- 7. Collaboration and co-operation across silos. Shared ownership of data.
- 8. Building partnerships at all scales: within the university, within the city, nationally and globally.
- 9. Strong governance and enabling policy.
- 10. Clear, consistent, communication.
- 11. The means to keep our data secure, but accessible.
- 12. Provision of enabling expertise, tools, and methodologies to staff & faculty practitioners.

¹See, e.g., https://methods.18f.gov/discover/kj-method/.

Closing observations

"How do we communicate with each other the needs to be embedded in the strategy? Across disciplines, and career stages, it is like everyone speaks a different language."

> Anonymous town hall participant

Following an interactive question and answer period, participants were invited to share final thoughts as they departed. We combine here the themes identified in these parting thoughts with some the themes reported above.

There is a strong sentiment supporting the need to move with alacrity. Aspirations for Western to be a leader, and fears that we are being left behind, all point to a sense of urgency in developing, and executing, a concrete strategy.

At the same time, some participants articulated a sense of being overwhelmed by the scale of the challenge ahead, and confusion about the scope. More than one colleague wrote: "What is a data strategy?". This suggests not only the desire for concrete goals and increased clarity, but the need for better communications mechanisms.

Several participants reported that combing faculty and staff together in the town hall allowed for a diversity of experience and perspective that led to a stronger outcome.

An equal number of participants commented, respectively, that the town hall was too focussed on the corporate needs of the university, or too focussed on the academic needs².

Centralization was a popular theme, and notable in the fact that it was one of the few topics on which there was not a consensus. Some participants wrote strongly in favour of centralization, including centralizing data analysis as a means for discovering insights not visible at a local level, and the importance of centralization of instruction to ensure quality. A nearly equal number of participants expressed concerns about centralization as a means of creating power imbalances, furthering the "corporatization of the university" and enabling the "neoliberal hijacking of research data".

Many participants expressed a strong desire to continue contributing to the development of the strategy, including calls for transparent, inclusive processes. It is truly heartening to see this enthusiasm, and engagement, and it will be critical to ensure that this willingness to participate is respected and leveraged.

Several existing points of excellence, in both academic and business units, were described by participants; we should build from these points of strength. At the same

²This emphasizes the need for procedural mechanisms to ensure that all stakeholders are fully engaged as the strategy is developed.

time, concern was expressed that highly-relevant expertise might be overlooked or marginalized.

The overall sentiment of both the formal submissions, and informal discussions, was one of optimism and enthusiasm, tempered by deeply important concerns around values and ethics. The Western community is ready, and willing, to walk this road, and insists on doing so with integrity.

Member checking and feedback

This document is intended to capture the discussion that took place during the town hall on November 19, 2019 in a descriptive manner. In the coding and collapsing of like themes, there are necessarily elements of analysis and interpretation. If this document fails to capture essential points, or mischaracterizes points you have made, please help us make it right.

Send feedback, corrections, and queries to datastrategy@uwo.ca.