New Digital Research Infrastructure Organization

AGM Remarks by Incoming NDRIO CEO Nizar Ladak and Q&A with Peter MacKinnon, Vice-Chair, NDRIO Board of Directors

September 24, 2020

Incoming CEO Introduction, Nizar Ladak

Dear Board Directors, NDRIO Members, Colleagues and Friends,

In my first remarks as your inaugural CEO, it would be remiss of me not to begin by paying tribute to the pioneers whose vision led to the formation of NDRIO. I'm referring to many individuals and organizations, and it would take the remainder of my time to identify each by name. However, a few groups I ought to acknowledge are the Leadership Council for Digital Research Infrastructure, the Government of Canada, NDRIO's Applicant Board and interim team, many partners, and of course, Canada's researchers who want nothing more than the tools to propel Canada onto the international stage as a leader in the knowledge economy.

As I wrote this speech, I thought deeply about what I wanted to convey. I then realized it didn't matter what I wanted, I needed to address the question that many of you have legitimately asked. Specifically, how will things be different through NDRIO? In other words, could we paint a picture of what the future holds? The answer is yes, we can, because your vision of our DRI ecosystem is the one NDRIO hopes to facilitate. We will learn about your vision through the first strategic planning session for NDRIO in the fall. Be assured, all of you will feature prominently in its planning and execution. Another group that will feature prominently is of course NDRIO's Board. I could not be more humbled by the caliber of NDRIO's Board and their selfless contribution to our organization. NDRIO's Board is a cadre of individuals who like the Captains of a ship will steward us toward a destination and course-correct should we ever deviate from that path.

The theme of my remarks is to look forward, but we must also appreciate where we have been in order to understand where we wish to go.

In the earlier part of today's AGM, George Ross and others have shared what NDRIO has accomplished to date. Progress, I hope you will see as a strong step forward. Guillaume Bourque has announced our Researcher Council. I want to state publicly that I personally intend to participate in Council meetings so I can learn directly from those we serve. One of my sincere joys is learning about the remarkable achievements that occur daily by researchers and the Highly Qualified Personnel who help make their dreams a reality.

I've spoken about where we wish to go, but I feel we must also call out our limitations in order to make them redundant in the future. Our limitations have emerged over decades and will take time to address. I feel our limitations can be described by three nouns: (1) Division, (2) Segregation and (3) Competition. In that context, I hope we aspire for a future that espouses: (1) Unity, (2) Integration and (3) Collaboration.

- We see division in our ecosystem. Individuals and organizations hold different roles. For example, those who manage computing environments, those without computing environments, provincial vs. federal, physical sciences and humanities. Indeed, we have a system of divided parts, but what we strive for is an ecosystem that is a complex network or interconnected systems.
- 2. We have segregation of components. We have Advanced Research Computing (ARC), Research Data Management (RDM), Research Software (RS) and Networking as though each were sufficient in and of themselves. Yet the reality is, in Canada's DRI ecosystem, the sum will be far greater than its individual parts. Instead of segregated components, we strive for a truly integrated ecosystem of interdependent relationships. Indeed, this segregation motivated the need for NDRIO's formation.
- 3. Finally, we have a system where during infrastructure competitions, BC competes with Ontario or Quebec competes with Atlantic Canada for limited financial resources. By design, infrastructure competitions as currently conceived have clear winners and losers. Yet, we express surprise when best practices are not widely shared with each other. And yet, why would these best practices proliferate when intellectual property and niche practices actually spell the difference between success or failure in the next impending infrastructure competition for millions of dollars.

My colleagues, as we turn the page in the evolution of Canada's DRI landscape, I believe we will evolve from Division, Segregation and Competition to our new nouns: Unity, Integration and Collaboration.

You may all be thinking: "Inspiring words Nizar, but the fundamental question is how do we go from where we are to where we collectively wish to be?"

The stark reality is if it were easy, we would have done it already. There is no silver bullet, no wizard behind a magic screen. We all know it will be through hard work, diligence, laser focus on vision and sheer determination and perseverance. NDRIO's job will be to facilitate processes so that we are all working towards the same goals and using a common set of principles in our work. In the organizational literature, this is widely known as a Mission, Vision and Values.

I will conclude by sharing our preliminary plans for the creation of our Mission, Vision and Values. For the next several months, I commit to conducting a listening tour with stakeholders across the country, building on the consultation work that has already taken place. Having led this kind of a tour previously on a few occasions, the biggest difference is that I am unable to speak with you in person because the pandemic has limited my ability to do the very thing I love to do most: meet and chat with all of you in person. Instead, Zoom and MS-Teams will have to facilitate our interactions until it is safe for us to meet in person. When we do chat, I will be building on work that my teammates like Ghilaine Roquet and George have developed including a current state review and needs assessment. This work, in addition to what I hear from you, will serve as inputs for the strategic planning session in the fall.

From that, the NDRIO Board will construct a strategic plan that will be disseminated to all of you once again, with one additional important question: "Did we get it right?"

Team, we have much to achieve together. I for one, could not be more motivated or excited by what lays ahead. As I have written in response to the hundreds of emails I have received since my announcement: I am daunted by the challenges we foresee, but I am reassured by the outpouring of support from coast to coast that we have received.

In conclusion, I leave you with a few phrases that will guide our work going forward.

- The past is our teacher. Let us learn from our past missteps and not repeat them.
- The present is our opportunity. Let us take full advantage of our collective strengths and shared ambitions for our system.
- The type of future we wish to achieve is our motivation as we elevate the one group we all serve: Canada's Researchers.

Thank you, Merci, Miigwech.

1. Expand on the themes of Unity, Integration, Collaboration. What needs to happen in each of these areas?

We routinely use the term DRI "system". I feel we have more work to do to truly call ourselves a "system". A system, by definition, is a set of things working together as parts of an interconnected, interdependent and interactive mechanism. Today, I feel we only fulfill one of those components in that we are interacting with one another. I do not feel we are demonstrating behaviours or practices that would suggest we are interdependent or interconnected.

NDRIO's very formation stemmed from the recognition that data management, research software and advanced research computing were not functioning interdependently or interactively. Yet the concept is so obvious in many ways. What good are a bunch of multi-million-dollar computers, if the data doesn't exist in organized ways or supported with software that maximizes its use?

I sincerely believe that if we collaborate and set-aside our tendencies to behave independently, Canada can be a leader on the global stage in the knowledge economy.

2. What are some of the bigger opportunities you see?

You will remember when I was asked this question during the interview process Peter, I had shared the experience I had when visiting other countries and talking about DRI. I learned that the very thing that makes us Canadian, is also our niche in the global market.

That is, our multicultural identity and our respect of multiculturalism. Let me explain by way of an example. For all of those watching today, this evening, ask a friend, family member or significant other to perform a task on your cell phone or word document. For some, they will do so in the same way as you perform it. For others, the outcome will be the same, but the tactic will be different. The likelihood it will be different will also probably depend on the gender or cultural background of the individual. Our lived experiences by virtue of our gender and our ethnocultural backgrounds influence the way we see and interact with things.

In Canada, the likelihood that a product or software was created with a multicultural team is quite high. You will have a French Canadian, someone from South America or Europe participating in a team to design a product. Their lived experiences will shape the programming method or tactics used. As a result, the adoption rate and usage of Canadian exports is substantially higher because in foreign markets, these products were designed by similar experiences of the users from these countries.

I feel our big opportunity is to exploit this strength and maximize it on a global scale.

3. Expand on some of the challenges, and how we might overcome these?

I believe we have misaligned incentives. For example, our existing resource model places a disproportionate burden on a selected number. For example, as I had shared in my opening remarks, we have a system where our colleagues are asked to compete during cyberinfrastructure competitions and are then expected to share the very best practices that enabled them to win the competition. To be clear, I'm not suggesting competition is bad or should be avoided, what I'm suggesting instead is that we include incentives in the way we structure these processes to promote collaboration. For example, including selection criteria that gives more weight to proposals composed of teams from across provincial boundaries. We could also include expectations where inter-provincial training and development is a required component of each software installation. We could seek ways where each province receives funding for HQP development and when that occurs across Provincial boundaries, the incentives increase.

However, the best part about addressing these challenges Peter, is that the solutions already exist in the minds and hearts of those working in this sector. In my new role, I hope to turn to the HQP who are serving Canada's researchers faithfully and ask them how we ought to address these challenges. NDRIO needs to be a catalyst for these ideas and help through our position to shine a spotlight on these solutions. To use an academic analogy, the stage may be ours, but the lectern needs to be given to the HQP who make our work possible.

4. As Members and researchers manage their daily work, including adapting to the impacts of COVID, how does that affect how NDRIO engages with the community?

In many ways, COVID has been both a curse and a blessing. When the whole country went online and utilized video-conferencing, little changed for those in the DRI sector. We had routinely met by video-conferencing for years and conducted our work remotely. Yet, some of the richest conversations often happen when a researcher is able to walk over to their colleagues and explain their challenge versus having to now book an appointment and set up a video-conference call.

This AGM is another example. I was sincerely looking forward to developing relationships with our members in person or over a coffee by virtue of being in the same location. Unfortunately, while my tactics will have to change, I'm hopeful the outcomes will be similar.

COVID has also been a blessing however, because never before have the public and policy makers had an opportunity to witness first-hand the relationship between research, computing and the immediate impact to their daily existence. COVID has demonstrated the value-proposition of Digital Research Infrastructure in very meaningful ways.

5. What are some the highlights of your 90-day plan?

I've used 90-day plans in each of my former three roles. Moreover, thanks to Ghillaine, George and the team, as a result of their consultations, we already assembled a great deal of valuable information to build upon. I'm not starting with a blank slate.

Highlights of the plan include an opportunity to hear first-hand from our members the answer to two questions I will ask everyone: "what works well?" and "what could be better?" The Board and our management team will then translate this work into an operating plan that our members will once again, have the opportunity to comment upon. Perhaps the two defining characteristics of the 90-day planning process are: (1) it will be highly consultative and (2) be transparent.

6. What kind of a leader do you aspire to be for NDRIO?

One of my favourite quotes is by John Quincy Adams: "If your actions inspire people to dream more, learn more, do more and become more, you are a leader". The kind of leader I aspire to be is a servant leader. My graduate degree and my studies for the past few decades have been in leadership and organizational design. Servant leadership flips the typical leadership script by putting people ahead of power. A servant leader prioritizes the team's growth and well-being, letting their own needs and ambition take a backseat.

This desired leadership style has been influenced by events in my life that make it quite personal for me. My father passed away when I was 11 years old. I was raised by a single mother and two older sisters. As I entered my 20s and 30s, I would run into family friends who would share stories about my father and mother and how the concept of service was more than an act for them, but a defining principle that shaped their lives and positively affected so many. They both instilled in me the need to think of others in everything I do. As I consider what kind of a leader I aspire to be, I want the work I have been a part of and the teams I have led to be my lasting legacy.

7. Nizar, do you have any final comments for Members today?

With regards to final comments, I want to convey a couple of points to our members. The first is to request their patience. We will work hard to achieve our aims,

but it is going to take some time and while we are all wanting to get to a certain outcome, there is no substitute for thorough due diligence.

The second and final point is that I have always believed anybody can make the decision between Good and Bad. The tough and really difficult thing to decide between is the Good and the Good. My Board will be faced with some very tough decisions. I see my job, with your help, is to give them as much information as we can to make the best decisions. I'm hoping to be able to count on your support to be able to do that.