A Community Informatics Research Network Vision Statement

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Abstract

Community Informatics (CI) became known in the late 1980s and early 1990s as a response to community needs. Within the field, community advocates and scholars have utilized evolving technologies to foster community engagement and empowerment. Ideas for CI have been created, disseminated, and promoted in large part because of the Community Informatics Research Network (CIRN). This paper investigates the evolution of CI and the essential role played by CIRN in shaping the field's trajectory. Collaborator interaction and complex socio-technical linkages are emphasized throughout the text, which highlights the worldwide, interdisciplinary nature of CI. Further, the paper investigates the accomplishments and shortcomings of the CIRN community and ultimately underscores the need for a comprehensive vision statement as we enter our next 20 years. The development process of this vision statement, along with CIRN mission, values, and strategies, as well as key literature, conference themes, and a CI declaration, are outlined.

Through examining the historical roots of CI and CIRN, the paper provides insights into the ongoing dedication and development of global, inclusive, ethical, and culturally sensitive practices. The proposed vision and mission reflect the aspirations of the CI community, providing a roadmap for navigating the complexities of society, technology, and global collaboration. The strategic efforts are intended to improve research, practice, teaching, accessibility, and inclusion in the field of CI. This comprehensive vision aims to empower communities globally via the wise use of information and communications technology.

Keywords: global empowerment; inclusive community involvement; cultural diversity; sociotechnological relationships; ethical technology integration

The Need for a New Community Informatics Research Network Vision Statement

Emerging in the late 1980s and early 1990s, Community Informatics (CI) as a field has its roots in the efforts of community organizers and activist scholars worldwide. These individuals utilized emerging technologies, such as email and the World Wide Web, to engage with communities and facilitate information sharing, learning, and action. Professionals and activists across diverse disciplines who participated in this transformative process of adopting these new technologies helped to close the gap between research and community. The Community Informatics Research

Network (CIRN) has been a key mechanism through which CI ideas have been developed, shared, and promoted.

A body of documents and thematic conversations have evolved over the past two decades, bringing forward a range of inspirations and foundations for the field (see Appendices 1, 2, and 3 below). These activities have highlighted how CI as a field is used to facilitate a people and community-centered approach to research and practice addressing issues through information and communication technology (ICT) with special emphasis on people, communities, their well-being, and their empowerment. In particular, CI as a field has functioned as a platform for dialogue between experts in ICT research and development and those with local community expertise.

Throughout, three questions have been emphasized:

- 1. How can the development of technological solutions be shaped collaboratively to ensure they are not only meaningful and valuable to communities but also do not overshadow their needs and priorities?
- 2. How can researchers and practitioners engage with communities to co-define, resist, and/or situate selected technology to advocate and empower their voices?
- 3. How do researchers and practitioners identify the hybrid collectives in which different agencies interact, navigate, and position themselves across multiple community priorities and needs within these hybrid collectives?

This challenge becomes even more significant when working with marginalized communities with diffused, unstated, or ambiguous needs and priorities.

To address these questions, those employing CI theories, principles, and practices use community development methods, such as community-based research, to work with community members to develop holistic and nuanced views of social-technical relationships. Information collection, storage, retrieval, contextualization, and communication to address immediate community-defined needs are emphasized over specific technological solutions. Further, attention is directed towards considerations such as the type of community organization, management, and resources required. This is done with a keen awareness of the political and economic implications associated with these aspects. Selecting, co-designing, appropriating, and innovating-in-use a range of technologies is then framed within this community development with an information focus. Consequently, community members and CI practitioners also collaborate to advance community capacity for what the French philosopher Michel Foucault called "power/knowledge" (Foucault, 1980). The two words are inextricably linked to each other: power influences knowledge, and knowledge influences power. This is a concept that has influenced the thinking of CI scholars.

Community Informatics, as a wide-ranging field of inquiry and practice, has taken an interdisciplinary approach. To bring diverse fields into conversation, a CIRN began forming in the early 2000s. Through this network, those from CI have been actively meeting in person and through online forums with others for the past two decades and represent areas like information

studies, community archives, development informatics, gender and rights theory, communication and cultural theories, and environmental informatics.

A constant theme under consideration within the CIRN community has been the frequent non-or under-considered exploration of ICT within communities at the margin, including both those in the so-called Global South and those in the industrial and post-industrial societies. The CIRN community has resolutely worked to expand critical awareness—a "conscientization"—in conversation with our grassroots community partners. Together, this coalition of diverse voices, which brings in perspectives from around the world, is working to explore decolonial approaches to our work, along with methods for considering the structural inequalities resulting from contextual interactions between group belongings and power relationships.

Significantly, from the very beginning, CIRN has sought to bring in the voices of Indigenous Peoples and traditional knowledge. These understandings are then explored in parallel with Western science. CIRN has recognized the importance of Indigenous Data Sovereignty. This has been defined by Indigenous scholars and activists themselves as "the right of Indigenous Peoples to own, control, access and possess data that derive from them, and which pertain to their members, knowledge systems, customs or territories" (International Work Group for Indigenous Affairs, 2021, para. 2). Further, we are working to move beyond the English-speaking orientation of CIRN and the various socioeconomic delineators (e.g., income levels and geographic location), which have limited inclusive participation within the interdisciplinary conversations.

A range of documents has emerged from various CIRN events, such as past conference proceedings and attendee lists, conference themes, mailing list discussions, and other valuable outcomes of participation over the past years, selected highlights of which can be found in the appendices of this statement. Upon a review of these, we have acknowledged the commendable progress achieved as a network. However, in this process, we have also identified areas where we have fallen short in consistently and collectively advancing our ideals and visions. We recognize the essential need for a formally published statement encompassing our community of practice's values, vision, mission, and strategic initiatives. From this, our goal is to initiate a continuous series of publications, conference themes, research initiatives, and instructional materials that will clarify, critique, and inquire more deeply about the specific points outlined below, fostering a more comprehensive understanding and commitment to our shared objectives.

While our interests are more about power/knowledge and social-technical systems, contextually, the pervasive influence of global, extractive capitalism—prioritizing profit over the needs of individuals and communities with a corresponding impact on social-technical development—cannot be ignored. It has been a constant concern for CIRN and influenced our thinking.

Consequently, it is imperative to actively seek out alternative voices, ideas, and skills to support alternatives resisting social-technical structures under exclusive command and control of global capitalism in areas of our work. Many of us are involved in higher education and are concerned that the narrow focus of higher education in many societies worldwide tends to either downplay, ignore, or intentionally conceal critical ethical questions related to technical and information justice. Part of the CIRN challenge is for us to change what goes on in higher education and to

simultaneously support those who work in other sectors that are challenging hegemonic thinking and action around social-technical inequalities.

We propose a vision and a mission for the CIRN for the next 20 years that can facilitate our strategic action-reflection praxis in support of individual and community conscientization, agency, and liberation from oppression in its many overlapping forms.

How We Developed This Vision

In 2022, the annual CIRN conference held at Monash University in Prato, Italy, focused on the theme "20 Years of CIRN: Examining the Past, Present, and Future of Communities and Technology." This very successful event marked the beginning of a year dedicated to further reflection and discussions about the field's evolution and the associated network, which were conducted through numerous email exchanges and video conference meetings. The CIRN community actively sought feedback on why previous participants attended the CIRN Prato conferences, as well as the insights and takeaways gained from interacting with other participants. The results emphasized the value of this informal network, highlighting how participants' research, teaching, and practices took on core CI ethics, principles, and emerging trends.

As scholars enter the third decade of CI, a period of reflection has again underscored the crucial necessity for the field to prioritize community needs and contribute to individual and community well-being. As a key mechanism through which CI ideas have been developed, shared, and promoted, CIRN has worked over the last two years to define a clear statement of values, a vision, and a mission, which may then be contextualized socio-technically within a range of CI implementations. Further, we recognize the need for strategic initiatives to locally contextualize practices while sharing key findings and resources globally and inclusively.

The initial rough draft of this document was created during both the in-person and remote components of the November 2023 CIRN Prato Conference, which was themed "Thinking, Writing, Dialoguing: A Hybrid Conference for the Future." The conference program included the following Thinking, Writing, Dialoguing sessions:

- Creating A Community Informatics 2023-2028 Vision Statement;
- Thinking, Writing, Dialoguing: A Concept Mapping Session;
- Al Dialogue: ICTs, Al, and Community-defined Development Goals;
- Workshop: Thinking, Questioning, Writing Our Vision Statement;
- Final Workshop, Plenary, and Close;
- Post-conference Writing and Collaboration.

Subsequent drafts of this document were crafted in November and December 2023 by a working group of conference attendees, which formed during the post-conference writing session. The

draft was then circulated among all 2023 CIRN conference participants before a final review in January 2024 by the working group. To allow for comprehensive input from more members of the CIRN, the document was shared for review and comments through the CIRN mailing list before it was submitted for open review in *The Journal of Community Informatics*'s discussion list in late January.

Community Informatics Research Network Vision

The CIRN community aspires to build a global, multicultural, united, pluri-linguistic, and engaged CIRN network that actively contributes to a better future. This commitment involves:

- 1. Tackling the social, environmental, and technical challenges of our time by supporting the development of vibrant, empowered, informed, independent, and participative communities worldwide.
- 2. Collaboratively generating knowledge and skills within communities, emphasizing a partnership approach rather than one that is extractive, aiming for mutual empowerment and shared learning experiences. This understanding serves as the foundation for developing technological or non-technological solutions that improve information collection, sharing, preservation, and utilization within individuals and communities.
- 3. Embracing the social, cultural, economic, and political diversity found in communities across the globe and acknowledging the growing significance of First Nations and Indigenous Peoples as sovereign custodians of valuable knowledge and contributors to our national identities.
- 4. Inspiring, informing, supporting, and educating scholars, researchers, students, practitioners, and community representatives to contribute meaningfully to the field of CI. Our commitment is grounded in principles of inclusivity, equality, and collaboration.
- 5. Promoting reflection and dialogue with partners, avoiding top-down research or implementation by providing a space for our partners to highlight their inquiry, goals, and pathways forward.
- 6. Respecting our differences, given our diverse backgrounds, cultures, and fields of expertise. We highly value critical openness and dialogue.
- 7. Fostering a critical approach and supporting a wide perspective that assures space for different—sometimes opposing—positions in reading the present and the future of the assimilation of new technologies in everyday life.

Community Informatics Research Network Mission

The CIRN community aims to globally empower the CI field and inspire, engage, enable, support, uplift, and connect with researchers, students, and practitioners worldwide. Our commitment

lies in enhancing the well-being of individuals and communities by effectively and inclusively using information and communication technologies. Through collaborative efforts, informed dialogue, and community-defined objectives, the CIRN community strives to establish a global, dynamic, and interconnected network dedicated to addressing contemporary challenges.

Community Informatics Research Network Values

The CIRN community advocates for the following values to foster positive engagement and collaboration with communities.

- 1. Community Empowerment through Information, Knowledge, and Awareness: Utilizing ICTs, we support the collection, classification, storage, retrieval, sharing, and dissemination of information(s) to enhance community well-being and empowerment. We aim to facilitate the co-creation and successful implementation of locally meaningful, valuable, and actionable knowledge.
- 2. Active Community Involvement in Research and Practice: We work to advance and enact capabilities through the active engagement of community members in the development and implementation of research and practice projects. We recognize the complexity and challenge of diversity. We acknowledge participation as essential for meaningful outcomes, as well as for the transfer of acquired knowledge from those leading the projects back to the community.
- 3. Sustainable Information and Communication Technology (ICT) Solutions: We recognize the importance of balanced considerations encompassing ecological, social, and economic dimensions as the foundation for developing sustainable ICT solutions within communities, aligning with specific United Nations Sustainable Development Goals in ways that also align with community-defined development goals.
- 4. **Research, Education, and Practice Equilibrium:** We underscore the equal importance of research, education, and practice, recognizing their linkages. This holistic approach promotes CI as a viable solution to the challenges posed by technology in society.
- 5. Locally Relevant, Globally Connected Network: We actively strive to facilitate engagement with and derive mutual benefits from our community's activities without regard to citizenship, disability, ethnic origin, gender, geographical location, language, political philosophy, race, or religion.
- 6. Intellectual Polyculture Built Upon Data and Information Sovereignty: We recognize that CI knowledge is co-created from diverse communities, cultures, and knowledge systems. We work to emphasize the positive polyvalence of the knowledge systems/epistemologies. Instead of endorsing any single knowledge system as dominant, we actively promote the coexistence and appreciation of diverse perspectives. We aim to create shared resources and shared authority that are available to others without cost to the greatest extent possible.

Community Informatics Research Network Strategies

1. Foster Community Empowerment through the Field of Community Informatics:

The CIRN, composed of the annual conference, *The Journal of Community Informatics*, discussion forums, and other activities, establishes an inclusive interdisciplinary environment for researchers, practitioners, and students. To every extent possible, this interdisciplinary environment will facilitate multilingual conversations. Our goal is to secure support and funding for various activities, including events, presentations, teaching, learning, networking, collaborations, and publications. We are committed to enhancing the accessibility and inclusivity of conferences by organizing hybrid events and accommodating those facing travel constraints or cost limitations that hinder physical attendance.

2. Ignite Advancements in Research, Practice, and Education Regarding Community Informatics and Related Areas:

Our overarching goal is to inspire advancements in research, teaching, and practice by adopting diverse perspectives from various fields, including information studies, community archives, information and communications technology for development, environmental informatics, and others with a shared interest in people-first co-learning approaches to information and communications technology explorations. We are committed to developing educational resources at all levels through open-access materials and formal and informal learning systems. Our curriculum design emphasizes an inclusive approach, integrating "human factors," community development understandings and practices, and real-life community dynamics into technology interactions. As we are committed to holistic education, we strive to demystify jargon, incorporate moral and ethical perspectives, and prioritize the protection of cultural resources and intellectual property in our teaching, learning, and practice initiatives.

3. Amplify Community Informatics Voices from Around the Globe:

We advocate for increased connectivity and mobility in education and professional development, offering opportunities such as master's and Ph.D. programs, as well as certificates of competency. We seek funding opportunities to support knowledge-sharing networks and actively engage with institutionalized United Nations programs. Further, we encourage the principles of community empowerment and ethical practice brought into conversations with representatives of national and local institutions, governments, policymakers, and other decision-making networks.

4. Enhance Community Informatics Research Network through Collaboration with Related Networks:

To optimize the impact of the CIRN, we propose collaborative efforts with related networks (e.g., through joint panels, events, and projects). This strategy aims to strengthen synergies and interconnections among networks while fostering a collaborative environment for shared goals and advancements. We actively promote principles such as language revitalization, biocultural landscape protection, respect for sovereignty, interaction with knowledge holders, education tailored to community needs, preservation of cultural assets and resources, and safeguarding intellectual property in these collaborations (Kimmerer, 2016). By integrating these principles,

we strive to create a dynamic space advancing the ability to leverage technology in ways that are culturally sensitive and ethically grounded.

Acknowledgements

We greatly appreciate everyone who participated in the pre-conference discussions: Joy Bhowmik, Monisha Biswas, Barbara H. Craig, Yingying Han, Colin Rhinesmith, Luis F. Rodríguez, Amalia Sabiescu, Manika Saha, Angelika Strohmayer, Sara Vannini, and Sdenka Zobeida SALAS-PILCO.

This could not have happened but for the rich conversations with attendees of the November 2023 CIRN Prato Conference: Thinking, Writing, Dialoguing. In addition to the lead and core working groups, attendees include Gaia Antinelli, Joy Bhowmik, Monisha Biswas, Marco Bruno, Ivory Chorng, Adriano Cirulli, Cesare Di Leo, Charlotte M. H. Im, Claudio Melchior, Alessandra Micalizzi, Sergio Minniti, Ruth Livier Nuñez, Gillian Oliver, Sara Pane, Luis F. Rodríguez, Abdulmohsin Mohammed Sades, and Angelica Spampinato.

Thanks for the many contributions various colleagues provided through the CI Researcher mailing list throughout this process.

Further, we thank the Informatics Programs at the University of Illinois Urbana-Champaign for funding Daniela M. Markazi's research assistantship to engage in this work.

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Appendix 1: Key Literature

The following are some key inspirations and foundations that influenced and shaped the formation of a CI network. Authors include both those who identify as part of the field of CI and those who have been active within the broader CIRN.

Items are listed by year of publication.

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Appendix 2: Conference Themes

The inaugural CIRN conference took place in late 2004, following the Many Voices, Many Places Colloquium at the Monash Centre in Prato, Italy, in September 2003. The Monash Centre's intimate setting proved ideal for such gatherings. Since then, Prato has hosted conferences almost annually, with additional events in Cape Town and Brighton (UK) affiliated with the CIRN network. Workshops in Porto, Milton Keynes (Open University), and Montpellier have also been associated with the network. Below is a list of CIRN conferences and links to their proceedings from 2002 to 2023.

<u>Building Community Conference (2002)</u>: 5th Community Networking Conference: 3, 4, 5 July, 2002

<u>CIRN Prato Colloquium (2003)</u>: "Many Voices, Many Places" - Electronically Enabling Communities for an Information Society: A Colloquium Research Results, Lessons Learned, Policy Recommendations

<u>CIRN Prato Colloquium (2004)</u>: "Sustainability and Community Technology: What Does this Mean for Community Informatics?"

<u>CIRN Prato Conference (2006)</u>: "Constructing and Sharing Memory: Community Informatics, Identity and Empowerment"

CIRN Prato Conference (2007): "Community Informatics--Prospects for Communities and Action"

CIRN Prato Conference (2008): "ICTs for Social Inclusion: What is the Reality?"

<u>CIRN Prato Conference (2009)</u>: "Empowering Communities: Learning from Community Informatics Practice"

<u>CIRN Prato Conference (2010)</u>: "Tales of the Unexpected: Vision and Reality in Community Informatics"

<u>CIRN Prato Conference (2011)</u>: "To Measure or Not to Measure: That is the Question" (Attributed to a lost work of William Shakespeare)

CIRN Prato Conference (2012): "Ideals Meet Reality"

<u>CIRN Prato Conference (2013)</u>: "Nexus, Confluence, and Difference: Community Archives Meets Community Informatics"

CIRN Prato Conference (2014): "Challenges and Solutions"

<u>CIRN Prato Conference (2015)</u>: "Privilege, Information, Knowledge & Power: An Endless Dilemma?"

<u>CIRN Prato Conference (2016)</u>: "Engaging with Participation, Activism, and Technologies"

<u>CIRN Prato Conference (2017)</u>: Special Theme: Art as Archive: Archive as Art & The Imagined Archive

<u>CIRN Prato Conference (2018)</u>: Research, Practice, and Creative Endeavour that Aim to Shape and Influence Policy and Programs

<u>CIRN Prato Conference (2019)</u>: Whose Agenda: Action, Research and Politics

CIRN Prato Conference (2020): Virtual Seminar Series

<u>CIRN Prato Conference (2021)</u>: Community, Technology and this Moment

<u>CIRN Prato Conference (2022)</u>: 20 Years of CIRN: Examining the Past, Present and Future of Communities and Technology

<u>CIRN Prato Conference (2023)</u>: Thinking, Writing, Dialoguing. A Hybrid Conference for the Future

Appendix 3: A Community Informatics Declaration (2013)

Background on this Historical Document

"The World Summit on the Information Society (WSIS) was a unique two-phase United Nations (UN) summit that began with the goal of achieving a shared commitment to building a people-centric, inclusive, and development-oriented Information Society where everyone can create and share information" (Internet Society, n.d.). The two initial meetings were held in 2002 in Geneva and 2005 in Tunis. Subsequent forums were held annually through 2013 to work towards achieving the various identified targets. This was followed in 2014 by what was called WSIS+10, a high-level event to launch the development of a 10-year review, which was released in the May 2015 WSIS Forum.

The CIRN, in reviewing aspects of the various identified goals, was motivated to draft a Community Informatics Declaration to be introduced with leaders in advance of the WSIS+10 event. Michael Gurstein, one of the major founders of the field of Community Informatics in the late 1990s and early 2000s, actively led a very extensive discussion among Norbert Bollow, Susan O'Donnell, Polly Gaster, Douglas Schuler, Parminder Jeet Singh, and Martin Wolske over the second week of December 2013 in which a draft was prepared.

The document was sent to multiple mailing lists, including the CI-researchers and CI-Indigenous lists, on 12/18/2013 for a 48-hour "lazy consensus" with a Community Informatics Wiki space for open access to make comments and change edits. The following is the final edited version. Later responses led to the creation of an open wiki to serve as a counterpart to this Declaration, where further discussion and commentary were placed. However, the Wiki no longer exists.

An Internet for the Common Good: Engagement, Empowerment, and Justice for All

Effective use of the Internet holds the potential to benefit everyone. Currently, however, its benefits are distributed unequally — some people gain power, wealth, and influence from using the Internet while others struggle for basic access. Our vision is a technical, interactive, and information-rich Internet platform on which people in their communities and elsewhere — the poor and marginalized in Developing and Developed countries, women and youth, Indigenous Peoples, older persons, and those with disabilities — are able to develop and exercise their civic intelligence and to work together equitably and effectively to address our multiple individual and collective challenges.

Much more than just a new technology, the Internet is a new social environment that allows anyone to connect to anyone without intermediation. The Internet is not primarily a marketplace; it is a community space for human interactions, including communications, transactions, and management, where we expect principles of equity, fairness, and justice to prevail. Governance of the Internet must be directed to ensuring that this new social space functions effectively for the well-being of all.

A CI approach to Internet governance is one that supports equity in the distribution of Internet benefits and ensures that longstanding social, economic, cultural, and political injustices are appropriately addressed within this new technology and social environment. Questions of social justice and equity through the Internet are central to how both the Internet and society will evolve. It is critical that people are free and empowered to develop the Internet infrastructure in ways that reflect the core values and ways of knowing of the different communities that adopt and adapt this technology.

Instead of a singular, universal Internet infrastructure, we support the development of an Internet in which communities are the "first mile" and not the "last mile." We believe that the primary purpose of this Internet is not to mine data and make human knowledge into commodities for purchase and sale; rather, it is to advance the development goals of communities equally, leading to a more just and fair distribution of and within these universally and widely distributed infrastructures.

As both citizens and community members in an Internet-enabled world, we have collective interests and perspectives — rights and responsibilities — for how the Internet is deployed and managed now and into the future. These need to be expressed and affirmed in all the forums where the future of the Internet is being discussed. As a collective and as members of civil society, we have developed a charter for Internet governance based on principles of CI. We appreciate your interest and welcome your support.

We aspire to an Internet that is effectively owned and controlled by the communities where it is deployed and used and Internet ownership that evolves through communities, which in turn are federated regionally, nationally, and globally. The Internet is, above all, a community asset and a public good before it is a site for profit making. Similarly, it is a local community utility before it is a global artifact. Equally with the access layer, the higher layers of applications and content should be community-owned and controlled.

Community ownership and control should support a rich ecology of commercial enterprise, but the enterprise is subject to community/public supervision and serving community/public interests.

A just and equitable Internet includes:

- Fair and equitable means to access and use the Internet: affordable by all and designed and deployed in such a manner that all may access and realize the benefits of effective use, including the poor and marginalized in Developing and Developed country communities, women and youth, Indigenous Peoples, older persons, those with disabilities, Internet users and non-users alike; no one, from any community globally, should be without access to the Internet.
- 2. Equitable access within all communities to the benefits of the Internet. Benefits include access to information and the opportunities to communicate, increased effectiveness of

communications and information management, and the opportunity to contribute to and participate in system development and content creation. Everyone, within all communities, should have the right, the means, and the opportunity to access and share the full intellectual heritage of humankind by means of the Internet without undue cost or hindrance.

- 3. Respect for privacy. People must have the right to use the Internet without unauthorized surveillance or systematic interference in private communications by government authorities or corporate interests.
- 4. Infrastructure that ensures the maximum level of personal security and reliability.
- 5. Opportunities for all within all communities to build, manage, and own Internet infrastructure as and when it is needed.
- Governance of the Internet by democratic principles and processes including privileging the input from communities affected by decisions and ensuring for the inclusion of the widest possible perspectives supporting the development of our technology and digital environments.
- 7. A peer-to-peer architecture where each node or endpoint is equal in power and privilege to every other endpoint and where there is complete neutrality of the architecture and the medium for all users and all applications.
- 8. A recognition that the local as a fundamental building block of all information and communications and where the "global" is understood as a "federation of locals."
- 9. Equal opportunity for all to connect and communicate in a language and culture of their choice.
- 10. Recognition and equally privileging of the many types of knowledge and ways of knowing, nurturing pluralism, and building from the capacities of each individual, community, and knowledge society.
- 11. Support for collaboration, engagement, education, solidarity, and problem-solving as the stepping stones to civic intelligence and the capacity of communities, civil society, and people generally to equitably and effectively engage in informed self-governance.

Signed

Michael Gurstein, Centre for Community Informatics Research, Development and Training, Canada