#mediaX2019 Conference: Digital Communities and the Augmented Human Experience

April 25, 2019 Mackenzie Room (3rd fl. Jen-Hsun Huang Engineering Center)

Welcome: *Keith Devlin, Executive Director Emeritus, H-STAR Institute*

"Citizenship in a Networked Age" – Short Film

Richard Sergay, Award-winning Journalist, Senior Media Executive

Citizenship in a Networked Age embraces the positive potential of technology while also addressing its deep implications for society. Drawing on the best of scientific insight and spiritual wisdom, it aims to promote promoting human flourishing on a global scale.

- 1. How will we, as citizens, make moral decisions in a networked age?
- 2. What privileges and responsibilities will we hold?
- 3. Can artificial intelligence contribute to enriched citizenship and democracy?

What Can We Learn About Culture from Linguistic Analysis

Amir Goldberg, Associate Professor, Organizational Behavior, Stanford GSB, Associate Professor, Sociology (by courtesy), School of Humanities and Sciences, Stanford University

The way we use language reflects our cultural beliefs and understandings, and predicts our ability to integrate with others.

- 1. How we use language provides information about our cultural fit.
- 2. Cultural fit, as measured with language, predicts exit, promotion and compensation in organizations.
- 3. Cultural diversity is conducive to firm innovation but not to operational efficiency.

Evaluating Community Interventions

Johan Ugander, Assistant Professor, Management Science & Engineering, David Morgenthaler II Faculty Fellow School of Engineering, Stanford University

When trying to maximize the adoption of a behavior in a community such as a school or rural village, how should one target individuals? This talk will explore the frontiers of this research question, discussing strategies that leverage the structure of social networks to target individuals expected to have an outsized impact on adoption, as well as how to evaluate the efficacy of such ideas.

- 1. Important interventions in communities are often targeted at individuals or small groups; we know very little about how to target such interventions effectively.
- 2. It is possible to leverage the structure of social networks without observing them, e.g. by leveraging the "friendship paradox" to reach more connected individuals.
- 3. Sets of more connected individuals don't necessarily lead to more community adoption. The most connected individuals may not be the most influential individuals.

Getting Brand Communities Right

Lara Lee, President & Founder, Creative Renewal

Let's find out how to avoid common pitfalls by intentionally designing, fostering and evolving thriving and resilient brand communities.

- 1. People first always. They will feel the difference, and it's the proven way to win.
- 2. Celebrate diversity and let healthy conflict blossom don't let your desire for efficiency lead you astray.
- 3. Transactions are not relationships think strategically and long-term about rich value exchange.



From Groups to Communities

Ioana Badea, Director, Strategic Pathfinding, Facebook

This presentation is an overview of the framework Facebook is using to understand online communities and their current and evolving needs. Main takeaways:

- 1. Community is a collection of people with something in common, in which they receive a sense of belonging, connection, feeling of safety, and give trust and investment over time.
- 2. Online communities are addressing a variety of needs and have evolved from connecting with close circles of family and friends to more fluid communities that enable people to connect with other people that share their interests.
- 3. Communities can have positive and negative outcomes on individuals and the society, and it is imperative we enable the former, while preventing the latter.

Learning in Professional Networks

Michael Richey, Chief Learning Scientist, Associate Technical Fellow, The Boeing Company

1. Adaptability matters: We are living in an age transformed by intelligent systems. Data science methods including Machine Learning, Artificial Intelligence and Natural Language Processing are changing business communication and making workforce expertise and culture more transparent and traceable. Coupling AI and digital data between agents and system culture enables us to see and measure interaction patterns, agent sensing, acting, and knowledge optimization.

Changes in the skills and knowledge necessary for successful digital life and workflow are impacting organization cultural systems. These changes promise rapid innovation for companies due to the need for a highly educated "adaptive" workforce, and also give companies new opportunities to track the flow-quality of information, including key competency and agility measures. These data are starting to uncover the distributive cognition of agents within a social network, "the ghost in the machine" where thoughts are embodied in the digital exhaust of agent actions. (Madhavan and Richey, 2016).

- 2. What adaptability looks like: Organizations are inherently relational. Firms are complex adaptive systems composed of a network of employees bound together by contracts, who perform tasks by negotiating internal relationships, as well as by observing, managing, and responding to constantly shifting external environments. (Richey Et Al., 2014 WIP). A missing component of the adaptability/change equation is understanding the linkages between actors, including the "supergroups" that emerge and move potential knowledge to action within the network. Key to understanding this flow of human and network capital is measuring the quality of social ties, i.e., making emergent actor expertise explicit as innovation resides within densely connected trusting, social-work related networks.
- 3. The future of workforce: Business leaders, educators and governments all need to be proactive in up-skilling and retraining people so everyone can benefit from the Fourth Industrial Revolution.

Bridging Global and Local Community Networks

Meryem Inapi, Mission Manager, General Secretary, Université Mohammed VI Polytechnique (UM6P)

- 1. Universities play a vital role in Building, Developing and Sustaining communities. Mohammed VI Polytechnic University (UM6P) continues establishing, serving and empowering various types of communities at the local and international level through impactful and innovative programs and initiatives.
- 2. UM6P is committed and actively engaged in leading Scientific Research, Innovation and Entrepreneurship through adopting new approaches and using state of the art technologies; the focus is on making these technologies serve the aspirations of the university in educating, training, building capacity, creating strong academic and research linkages locally and internationally.



The Intersection Between Human Learning and Machine Learning- How AI Will Fundamentally Change Teaching and Learning

Richard Tong, Chief Architect, General Manager, US Operations, Squirrel AI Learning

- 1. Actionable AI is the focus of Squirrel AI Learning's research.
- 2. Education needs fundamental paradigm shift from teacher-centric to learner-centric.
- 3. Advancement around Artificial Intelligence for personalized education at scale need all the best minds in the field to work together.

How to Digitize a Country

Toomas Ilves, Fellow, Visiting Scholar and Former President of Estonia

Digitization of a country or a society is not a matter of technology but is an analog process. Digitization requires:

- 1. A unique and secure digital identity with legal efficacy.
- 2. A strong, distributed architecture for data.
- 3. A guarantee of data integrity.

How Trust Influences Communities

Jeff Hancock, Founding Director of the Stanford Social Media Lab, Professor, Department of Communication, Stanford University

The tides of trust are changing. Technology is both disrupting and opening up trust dynamics. There are major implications for these trust dynamics for communities.

- 1. The truth bias, or our default to trust other people and messages, is crucial to healthy communities.
- 2. The concerns we have about fake news may be eroding that truth bias and undermining how people within communities trust one another.
- 3. Media practices are changing in response to fake news and people's trust needs, with an increased emphasis on the local and increased focus on one's communities.

mediaX at Stanford University is a forum, an incubator of ideas, and a programmatic framework to encourage and support multi-disciplinary research initiatives. Our initiatives explore how understanding people can improve the design of technologies – in the areas of learning, mobility, collaboration, entertainment and commerce.

As the affiliate program to Stanford's H-STAR Institute (Human Science and Technology Advanced Research) in the Graduate School of Education at Stanford University, mediaX programs are grounded on respect for different approaches to discovery and centered on our belief in the power of collaboration – between business and academic researchers, on campus and around the world.

In trusted relationships, aligned on questions that are important for the future, mediaX collaborations seed campus-wide research and coordinate industry interest. Through dialogue and collaboration, university and industry researchers challenge what we know now and stretch intellectual resources to gain new insights relevant to academic and business collaborators.

Together, we pursue new insights on how information technology affects people's lives, how to better design products and services to make them more usable, and the innovative use of communication technologies to improve the human experience.

To become a member of the mediaX Community, please talk to or email Martha Russell <u>martha.russell@stanford.edu</u>



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