

# JISTaP at 10

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A decade ago a group of scholars recognized the need for a publishing venue that would serve the expanding global information science research community and especially welcome and encourage authors from the Asia-Pacific region to submit to a peer-reviewed, internationally recognized venue. The editors wanted to be certain that impact and practice were as welcome as theory, thus the new journal title included theory AND practice. Also, the editors wanted the journal to be accessible to the broadest possible audience. Support by the internationally acclaimed Korea Institute for Science and Technology Information (KISTI) provided the financial and intellectual resources to launch and sustain the journal. The 40 issues of JISTaP over 10 years illustrates its success in a) attracting high-quality papers from scholars around the world; b) papers on both theory and practice; c) international reputation reflected in indexing and reach; and d) an open access publishing model that supports a Creative Commons rights regime that gives authors control over their intellectual work and that provides free and reliable access to students and scholars everywhere. It has been an honor to work with dedicated visionaries such as Professors Dong-Geun Oh and Kiduk Yang and the talented team at KISTI who have worked to realize that vision incubated more than a decade ago.


As JISTaP begins its next decade of service to the information research and professional communities, I offer a few observations and encouragements for information scholars and practitioners. This is certainly not a compre-

hensive list but enumerates some challenges I hope we can attack in the years ahead.

## 1. INFORMATION OVERLOAD AND QUALITY

I view information as intellectual energy. Historically, we have focused on its captured and stored form in various media (a kind of potential energy). Increasingly the kinetic forms that were traditionally active in human minds and biological processes have been joined by the instantaneous capture and transmission of human thoughts and actions and concomitant algorithmic processing to form a new kind of distributed kinetic intellectual energy. Information science is a discipline that aims to understand and enhance the genesis, organization, flow, use, and preservation of intellectual energy and the impacts that both potential and kinetic intellectual energy have on humanity and our environment.

Information scholars have long been concerned with finding information and in recent times with filtering vast volumes to avoid overloads. Classification systems, storage and retrieval systems, and summarizations save humanity enormous amounts of time finding information and navigating knowledge. This work must be redoubled and expanded to solve the dual problems of volume and manipulative deceit. The attention economy and the growing clouds of electronic kinetic information increasingly overwhelm us, confuse us, and mis- or disinform us. Classical editorial and aggregational services such as indexes,

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reviews and research syntheses, readers advisory services, press briefings, DIY (do it yourself) videos, and content filters are not enough. We must create and apply new scalable heuristics, tools, and strategies to assess accuracy, veracity, and quality from a variety of cultural, methodological, and intellectual perspectives. This requires classic information science research and practice adapted to a highly dynamic electronic information ecology.

## 2. INFORMATION GENESIS

There is considerable attention given to disinformation effects and interventions in social media, however, more pervasive challenges await and require information scholars' attention. The rise of generative AI algorithms that write original texts and produce original images, videos, and soundtracks are but simple parlor tricks that serve to alert us to the more consequential generative powers of synthetic biology that aim to automatically generate our food, new drugs, new organisms, and radically altered human beings. This goes beyond the Internet of things to the creation of new things. What have we learned from our disciplinary experience organizing, documenting, and mitigating or annotating information that can be applied or adapted to these new challenges? It seems to me that our discipline has tended to focus on the organization/flow/use/preserve elements of information science and not focused so much on the genesis element. We look back toward genesis via bibliometrics/informetrics and investigations of scholarly communities or invisible colleges, but I hope we can reimagine ways to get closer to information genesis. Because so much of the genesis of distributed kinetic and stored intellectual energy is enabled by digital tools, we may be positioned to go beyond diary studies and transaction logs of discrete information behavior to more continuous and contextualized peeks at information genesis over time. Of course, privacy and human dignity challenges must be considered fully in this work—a hallmark of information science is to consider the human consequences of information research. Perhaps we can imagine some kind of digital radioactive isotope that is attached to every new bit created and some kind of global, public blockchain of provenance that persists with personalized authority control over public access. Perhaps we can image non-technical solutions such as regulatory constraints or training requirements. What is important is that we work to focus on information genesis and imagine how we can better serve both individual creators and collective humanity.

## 3. THE DIGITAL EXPOSOME

Every moment of our lives we are exposed to physical and informational elements that are as important to our well-being as our genetic makeup. Physical exposures from air, water, land, radiation, buildings, climate, and food have long been recognized as strong influences on our lives. Informational exposures from the built environment, human activity and interaction, and media are increasingly recognized as having strong influences on our well-being. Humanity is beginning to understand that a healthy information ecosystem is as important as our physical ecosystem. The emerging field of exposomics aims to understand the ways that these exposures affect our lives and how we might mitigate negative effects. To date, exposomics focus has been on the physical exposures and mitigating negative effects. I believe that information scholars are well positioned to investigate the informational ecosystem to better understand both the negative and positive effects of digital exposures whether these exposures are incidental, targeted, or actively sought.

Information scholars could develop and promote a framework for exposomics that includes information ecology as well as physical ecology and identifies incidental and intentional exposure drivers, costs, and risks. We could work to discover causal pathways from physical and informational exposures to states of physical and mental wellness and happiness. We could create measurements and instrumentation to assess physical and informational exposures (e.g., sensor arrays, behavior tracers grounded in informed consent) and we could build repositories of cases, practices, and solutions. There is considerable attention to the perceived problems of digital addictions, including treatment clinics and some biomedical and psychological research, however, we also want to understand why and how people seek digital exposures as well as encounter them and create tools or techniques that give people control over the exposures and consequent effects.

Information scholars have many important problems to address and contributions to make toward a better world. The three challenges included here only illustrate a few of these problems and are offered to stimulate discussion, debate, and imagination. I look forward to reading papers in JISaP in its next decade of service as we continue to develop theory and practice in information science.

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