Digital distribution of information has changed the way in which business is conducted, whether it be carefully considered purchases from an online retailer or impulse shopping in a competitive-bidding online market. Connections, both personal and professional, have morphed in recent decades, and gathering relevant statistics on internet traffic is both intellectually challenging and potentially lucrative. Advertising can be directed based on what you have perused before, which stories you “like” and, doubtless, clever algorithms to determine what you can afford. The European Union recently passed the General Data Privacy Regulation (GDPR), designed to improve the individual’s rights in the context of massive data collection efforts. Privacy is a major concern.

In parallel, there is a push for greater transparency, seen, for example, in efforts to require that all government-supported research be disseminated via open-access publication channels. Many funding agencies now require this—there are more than a dozen members of a coalition in Europe supporting Plan S (www.coalition-s.org), for which this is the key theme. The demand for, supply of, and range of reputations of open-access journals have been expanding rapidly. This expansion, in part, led to the appearance of so-called predatory journals that feature questionable editorial boards and little actual peer review but heavy promotion to recruit authors and punctual collection of fees without recourse or appeal.

Evaluating the pitfalls of open access is a tricky business, as authors have been duped and as creators of blacklists of alleged predatory journals have faced threatened or actual lawsuits. One of the best-known compendia of journals suspected of ethical flexibility was taken offline by the author (only to be re-created by others in a different form). Last year, a faculty member was suspended for investigating the correlations between publications in questionable journals and salary and promotion at his institution. He was reinstated, but the case ignited vigorous debate on what criteria should be used in the generation of such lists, and the incredible harm that could be done to legitimate publishers or struggling young publications swept onto a “predatory” list based on subjective criteria.

One response has been to try to establish a whitelist of credible or trusted journals. OSA’s journals appear on these whitelists and reflect the integrity that is core to our mission. However, even these lists are no panacea; criteria can be set, but any system has inherent vulnerability. Establishment and maintenance of trust is essential, and it is traditionally based on a track record of integrity.

As I conclude this series of columns on the i4 core values of OSA, I encourage you to review those values and contemplate the best ways to tie them to concrete actions.

“Integrity. Authoritative generation, application, archiving and dissemination of optics and photonics knowledge requires a rigorous quality standards process that is fundamental to the society’s every action. Transparency in operations and internal governance is essential to maintaining the highest level of integrity and trust within our membership. Our commitment to excellence in content and methodology establishes The Optical Society as a trusted resource for scientific information worldwide.”

—Ursula Gibson,
OSA President