Research Perspectives: Through Whose Eyes? The Critical Concept of Researcher Perspective

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Abstract

In this article, we explore the notion of "researcher perspective," by which we mean the viewpoint from which the researcher observes phenomena in any specific research context. Inevitably, the adoption of a particular viewpoint means that the researcher privileges the interests of one or more stakeholders while downplaying the interests of other stakeholders. Preliminary empirical analysis of a corpus of 659 articles published in three separate years in the AIS Basket of Eight journals, undertaken in preparation for the present paper, revealed that around 90% of articles (1) adopted a single-perspective approach, (2) were committed solely to the interests of the entity central to the research design, and (3) considered only economic aspects of the phenomena investigated in the research. Taken together, we argue that these three characteristics are unhealthy for the discipline and are likely to lead to the neglect of important research opportunities. We suggest that the principle of triangulation be applied not only to data sources and research methods, but also to researcher perspectives and that a consequent broadening of the IS discipline's scope is essential. We conclude the article with prescriptive recommendations for the practice of research that is relevant to multiple stakeholders.

Keywords: Researcher Perspective, System Sponsor, Stakeholders, Usees, Information Systems

1 Introduction

In IS research, we study phenomena in various contexts that include information, systems that handle that information, and technology that supports that information handling. The organizations and individuals within our field of view are stakeholders, with interests that they wish to protect and advance. In empirical research designs, it is common that the interests of one or more of these stakeholders are privileged. A variety of stakeholders can be identified including the organizational entity central to the research context, which we refer to as the "system sponsor"; the employees who work with the information system in the context that is being studied;

the customers who benefit from and are affected by the information system; up- and downstream supply chain partners that are connected through the information system; and nonhuman entities such as local, regional or planetary ecosystems in which the research context and information system are embedded.

A key aspect of any research investigation is the perspective that the researcher adopts with respect to the relevant stakeholders. We use the term "researcher perspective" to refer to the view of the stakeholder(s) whose interests the researcher treats as being of primary importance. We believe that the issue of researcher perspective is significant for the information systems (IS) discipline because it strongly influences the impacts that IS research may have. A

research project that privileges the interests of a single stakeholder may not serve the interests of other stakeholders, and indeed may harm them. Further, that single stakeholder may be served suboptimally by the research project because the researcher's appreciation of the problem situation will lack the richness that would have resulted from a more holistic exploration of the phenomenon.

For example, consider the research genre of personal data markets. The research published in this area commonly treats the interests of marketing corporations as objectives, whereas those of consumers are conceptualized as constraints on the interests of the corporate players, and as challenges to the corporations' business models. In other words, researchers typically privilege the perspective of corporate entities and neglect the perspectives of consumers. Much of the empirical research undertaken in this genre comprises laboratory experiments designed to help clarify how corporations can minimize the cost of persuading consumers into trading off their privacy for a service, for convenience, or for a token amount of money. This process actively stimulates an arms race, in which those sympathetic to consumers' interests produce and distribute means of combatting the consumer marketers' techniques.

We suggest that a much more constructive approach to research on personal data markets would reflect the perspectives of not only marketers and marketspace operators, but also consumers. This would lead to a deeper understanding of the various stakeholders' interests and needs and a holistic grasp of the market as a gestalt. The foundations would be laid for strategies that address the needs of all the various stakeholders, sustainable market models, and active and informed participation by consumers, rather than sullen capitulation to marketers' power by some consumers and opposition and interference by others.

IS researchers consider many factors when selecting research topics to address, including, what is important, what is researchable, what appears capable of delivering original and interesting results, and what is likely to be appreciated by reviewers and hence is publishable (see Davison, 2019). We contend that IS researchers also need to consider to what extent research gaps exist as a result of prior research overprivileging the perspectives of particular stakeholders and underprivileging others.

Following this introduction, we first investigate the notion of researcher perspective through an extensive review of the relevant literature. This is followed by a summary of empirical studies that we have conducted in preparation for the present paper. We conclude with a discussion of the implications for future research in the discipline.

2 Theory Relating to Researcher Perspective

This section introduces the notion of "researcher perspective" and its relation to the IS research process. Consideration is then given to the stakeholders whose perspectives may be adopted, the dimensions on which the interests of stakeholders lie, and the nature of single-perspective, dual-perspective and multiple-perspective research.

2.1 The Concept of Researcher Perspective

Our arguments are relevant to all circumstances in which researchers study a domain in which stakeholders exist. Some kinds of research fall outside this scope, particularly metaresearch such as systematic reviews of existing studies, editorials, opinions and discussions of research methods. We adopt the following definition: ***A researcher perspective** is the viewpoint of a particular stakeholder in the relevant domain, which is adopted by a researcher as the, or a, viewpoint from which to observe phenomena during the conduct of a research project*.

It is important to appreciate the distinction between this concept and the many other senses in which the word "perspective" is used in the IS discipline. In particular, we are not referring to epistemological, ontological, or nomological assumptions. Nor are we referring to positivism, interpretivism, or other approaches to research. Similarly, our concern is not with the theoretical perspective, or "lens," adopted by the researcher. Our concern is instead with the stakeholder whose interests are recognized as objectives and whose value set permeates the researcher's view of the phenomena. In a metaphorical sense, researcher perspective is the angle of view from which phenomena are observed, or the entity through whose eyes the phenomena are perceived.

A wide variety of such viewpoints are possible. Whichever viewpoint the researcher selects will, during the conception, design, and conduct of the research, privilege the interests of one or more stakeholders. This is because the adoption of a particular viewpoint necessarily involves consciously or unconsciously favoring the value set of that stakeholder or category of stakeholders over those of other stakeholders. Where value conflicts arise, priority is accorded to the values of the chosen stakeholder. These conflicts are often not merely zero-sum trade-offs on a single dimension, but involve values on orthogonal dimensions. For example, a for-profit corporation's interests are mostly economic in nature, whereas not-for-profit, public sector, and advocacy organizations may focus instead on social

issues and/or environmental concerns. The issue of dimensions is further considered in a subsequent section.

The advantage of favoring one entity's interests over those of other stakeholders is that it permits the researcher to focus the research design on a single set of objectives. However, there are also disadvantages to this approach. Multiple stakeholders are likely to be involved in any phenomenon that IS researchers choose to investigate. We perceive this to have been mainstream thinking in the IS discipline at least since the recognition that "the phenomenon of interest [is] examined ... from the perspective[s] of the participants" (Orlikowski & Baroudi, 1991, p. 5). (We have pluralized "perspectives" in this quotation to avoid the implication that all participants share the same perspective. Phenomena are subject to multiple interpretations and so the perspective adopted by any one party is not definitive but simply one among many).

Our searches for terms associated with the concept of researcher perspective have been largely unsuccessful, in both textbooks on research and in articles dealing with the research process. Searches in leading IS journals identify limited usage in the sense described here. Important exceptions include Boland and Tenkasi (1995) and Constantinides, Chiasson, and Introna (2012). As Boland and Tenkasi explain, "perception is only accomplished through a perspective.... Unexpected events or findings can only be recognized as such from within a perspective" (1995, p. 354).

A researcher perspective is quite distinct from an "object of study" or a "unit of study." The "object of study" is the set of phenomena that the researcher observes, whereas "unit of study" refers to the level of granularity of the observation. Researcher perspective, on the other hand, refers to the direction or orientation from which the observations of the phenomena are undertaken. Hence, a researcher adopts a perspective from which observations are made of an object of study at a level of abstraction called the unit of study, together with a method that enables the collection and analysis of data. In the diagrammatic representation in Figure 1, the first segment depicts the interrelationships among the methodological concepts and the second segment provides an example in which a particular research project adopts the perspective of the system sponsor, with the researcher observing the activities of a work group through the lens of the technology acceptance model (TAM) (Davis, 1989).

2.2   Stakeholders

A commonly used term for the categories of entity that have an interest in particular phenomena is "stakeholders" (Freeman & Reed, 1983). Many stakeholders are participants in the process or intervention, in such roles as investor, data source, technology provider, system sponsor, and user (Seddon et al., 1999). However, the categories of stakeholders are broader than this (Pouloudi & Whitley 1997, p. 3), comprising not only "participants in the information systems development process ... viz. individuals, groups or organizations who take part in a system development process" but also "any other individuals, groups or organizations whose actions can influence or be influenced by the development and use of the system whether directly or indirectly."

Contrary to this inclusive approach, there is a strong tendency in industry and government practice, recognized in academic analysis, to include, as a qualifying condition for a category of entities to be recognized as a stakeholder, a requirement that the party be capable of significantly affecting the success of the project. This might derive from market power, or, in the case of a regulator, for example, institutional power. This approach has the effect of marginalizing all but the most powerful participants (Mitchell, Agle, & Wood, 1997, Achterkamp & Vos, 2008).

Prominent examples of less powerful participants are what are commonly referred to as "users." In business-to-business and government-to-business contexts, these may take the form of business enterprises that are smaller or otherwise less powerful than the primary entity. A common example is a large "hub" or downstream corporation (such as a motor vehicle assembler or a retail chain) dealing with smaller providers of components or shelf stock. In some circumstances, less powerful players may have genuine choice, but in others they may be forced to comply with what are tantamount to instructions or requirements. For example, Narsing (2005) studied Walmart's requirement that all of its suppliers be compliant with its RFID labeling requirements. As an indication of the impact of the choice of researcher perspective, consider the rather different research designs that might arise from the following alternative research questions: (1) *What IS design features support cost minimization by Walmart?* (2) *What IS design features support cost minimization by Walmart's suppliers?*
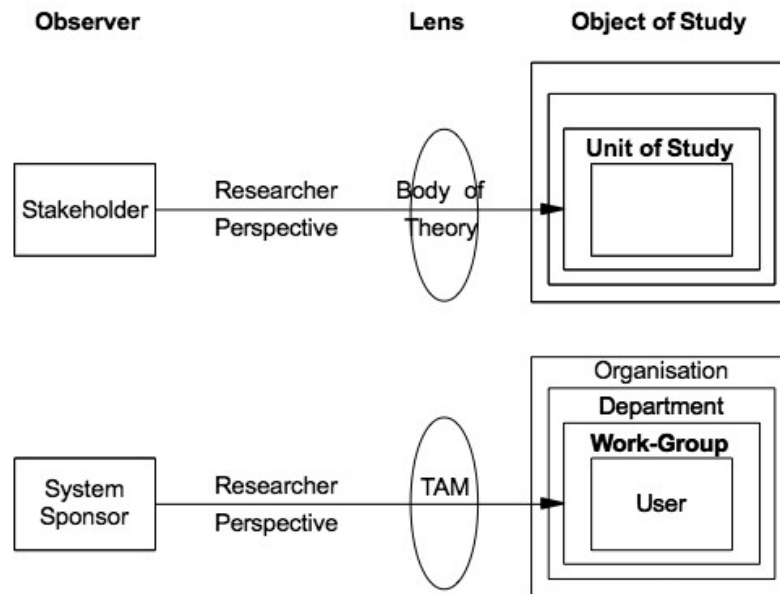
Figure 1: Conceptual Model of the Research Process

In the above example, an investigation into how IS design features might support cost minimization by Walmart would likely seek to prioritize the interests of Walmart alone. However, an investigation into how IS design features might support cost minimization by Walmart's suppliers would need to consider a range of criteria with regard to how a huge variety of suppliers could reduce their costs in dealing with Walmart. Similarly, in business-to-consumer contexts, the value proposition offered by a vendor is typically nonnegotiable: consumers may have little prospect of acquiring goods or services unless they fall in line with the system imposed on them by the platform, as well as any associated legal environment, that together enable and govern the transaction (Muzellec, Ronteau, & Lambkin, 2015).

Contemporary information systems have very substantial reach. As a result, there may be entities that reside in the background yet are nonetheless materially affected by the implementation of these systems. For example, an online travel booking system has the potential to disintermediate one or more companies, resulting in the cessation of business operations, layoffs, dislocation, and economic hardship for employees' families, not to mention inconvenience for passengers who used to avail themselves of the services of the disintermediated companies and perhaps for others in the regions in which the disintermediated companies operated. Another example relates to information systems that store personal data about third parties. The agreement[1] between the US and the EU with respect to the collection and storage of air passenger data belongs to this category (Mitsilegas, 2015).

The term "usees" is descriptive of those entities that are affected parties but not participants. The term has been in casual use since the mid-1980s in the IFIP Technical Committee TC9 (ICT and Society), and especially in the Working Group WG9.2 (Social Accountability and Computing) (Clarke, 1992; Fischer-Hübner & Lindskog, 2001; Baumer, 2015). The entities may be organizations or individuals and may fall into various categories, defined by, for example, attribute, function, or location. Usees may be aware of an IS that affects them, but in some cases they may be largely or even entirely unaware of the existence of the system, their entry in it, or the nature and implications of that entry. Examples include credit bureau holdings, pooled records of insurance claims, tenant databases, criminal intelligence databases, and the data holdings of companies that surreptitiously gather data about the online behavior of web users. Similarly, people with entries in the PRC's "social credit" system may only discover that they have a record in the system when they are prevented from using a transport service.

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[1] https://www.theguardian.com/world/interactive/2011/may/26/privacy-us-national-security

Usees might benefit from such systems, but it is common for their interests to be harmed by them, not only in those cases in which the system is designed for that purpose, but also when their details are accidentally exposed, e.g., through the actions of hackers. The interests of usees can only be recognized and appreciated if researchers adopt perspectives that accommodate their viewpoints. Their interests may be adopted instead of those of the system sponsor ("What impacts on consumers arise from access by a credit bureau to electoral register data?") or as well as those of the system sponsor ("What are the benefits and disbenefits to a credit bureau, and to consumers, of credit bureau access to electoral register data?"). Further examples are provided in the following subsection.

2.3 The Significance of Stakeholders' Perspectives for Research

The perspective that a researcher adopts has a substantial influence on the entire research design. It dictates the framing of the research, drives the selection and formulation of research questions, provides the criteria based on which alternative research designs are evaluated, and effectively determines what is included within and excluded from the potential outcomes of the research and how those outcomes are expressed. In effect, the choice of researcher perspective represents a choice of a beneficiary, i.e., a particular stakeholder that has the potential to benefit directly from the research.

The choice of researcher perspective has a particularly significant impact on the formulation of research questions. In order to provide some insight into the depth of that impact, the authors devised a research question that can be addressed from the perspectives of many different stakeholders: *What are the impacts of the withdrawal of the customer option of receiving printed invoices through the mail?*

The question is intentionally simple, in order to focus attention on the researcher perspective. While the question may appear passé or banal to IS academics, it is of ongoing relevance to IS practitioners, to the public, and to policy makers: even in advanced economies, 10-25% of households have no Internet access, with significantly higher percentages for households that are nonurban or low income, or whose occupants are all beyond retirement age.[2]

Table 1 presents a set of eight variants of the above research question. In the first five cases, the researcher

perspective reflects the interests of a single stakeholder or category of stakeholders, whereas in the other cases the researcher has the interests of more than one stakeholder in focus. Of the forms taken by the research questions in Table 1, some are familiar and even mainstream, whereas others are unusual. The authors' contention is, however, that all are within the scope of the IS discipline.

2.4 Economic, Social, and Environmental Dimensions

Beyond the perspective that a researcher takes when designing a research investigation is the notion of dimension. By dimension, we refer to the nature of the interests that a stakeholder has in a situation. In business contexts, most stakeholder interests are ultimately financial or economic in nature. On occasion, however, research may be undertaken on the social dimension, where, for example, a government agency uses an IS to improve the well-being of a minority group, or a nongovernment organization uses an IS to support an environmental objective. A specific example of research from the system sponsor perspective that is on the social dimension is Srivastava and Shainesh's study (2015), that examined healthcare service providers and their work for service-disadvantaged segments of Indian society.

Participative approaches to the analysis of requirements and system design have long reflected the social interests of individual users within organizations (e.g., Land & Hirschheim, 1983; Mumford, 2000). As interorganizational systems emerged, entities other than the system sponsor were recognized as having a stake in their design and implementation (Pouloudi & Whitley, 1997). Then, as individuals outside the organization became users of networked computing facilities, the systems became extraorganizational in nature (Clarke, 1992) and the individuals' actions and interests, both economic and social, also needed to be encompassed within the frame of reference.

Economic and social interests are associated with reasonably definable entities such as people and organizations of various kinds. Environmental interests might also be treated that way (e.g., by associating them with nature and wilderness reserves, national parks and environmental trusts). On the other hand, it may be more appropriate to treat the abstract notion of the environment as being a third dimension along with the economic and social dimensions.

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[2] **UK** (10% in 2016): https://www.ons.gov.uk/people populationandcommunity/householdcharacteristics/homeint ernetandsocialmediausage/bulletins/internetaccesshousehol dsandindividuals/2017;

Australia (14% in 2017): http://www.abs.gov.au/ausstats/ abs@.nsf/mf/8146.0?OpenDocument;
USA (25% in 2015): http://www.census.gov/content/ dam/Census/library/publications/2017/acs/acs-37.pdf

Table 1: Alternative Research Questions from the Perspectives of Different Stakeholders

Researcher perspective	Research question
System sponsor	What are the impacts **on an organization** of the withdrawal of the customer option of receiving printed invoices through the post?
Employees	What are the impacts **on employees** of the withdrawal of the customer option of receiving printed invoices through the post?
Economic region	What are the impacts **on the regional economy of the outsourced service provider** of the withdrawal of the customer option of receiving printed invoices through the post?
Industry value chain	What are the impacts **on other companies in the industry value chain (including those who manufacture and supply paper, printers, and ink, those who provide delivery services, and those who recycle paper)** of the withdrawal of the customer option of receiving printed invoices through the post?
Customers	What are the impacts **on people with no Internet connection** of the withdrawal of the customer option of receiving printed invoices through the post?
Forests and their denizens	What are the impacts **on forests and associated fauna/flora** of the withdrawal of the customer option of receiving printed invoices through the post?
Organization, customers	What are the impacts **on the organization and its customers** of the withdrawal of the customer option of receiving printed invoices through the post?
All stakeholders	What are the impacts **on all stakeholders** of the withdrawal of the customer option of receiving printed invoices through the post?

The emergence of "triple-bottom-line" [3] reporting ostensibly reflects this kind of thinking (Elkington 1994), although it is also critiqued as being inadequate to ensure genuine conservation and sustenance of the earth's ecology (Milne & Gray, 2013). Nevertheless, this tripartite notion has become a precept underlying the notion of corporate social responsibility (CSR) (Hedman & Heningsson, 2016). It is notable that a large proportion of "Green IS" research focuses on the economic dimension, addressing corporate concerns in an era of rising energy costs. However, "Green IS" research on the environmental dimension is also on the rise (Watson, Boudreau, & Chen, 2010; Elliot, 2011; Deng, Wang, & Ji, 2015; Gholami et al., 2016; Tim et al., 2017. See also the proceedings of AIS SIG Green Workshops).

During the last 50 years, as computing became a major consumer of electricity and as cathode-ray tubes mounded up in scrapyards, impacts on the environment have come to the fore. More recently, as the economic value of, for example, coltan[4] has come to be realized for the supply chains associated with the production of tantalum capacitors used in a wide variety of electronic devices, the exploitation of mineral-rich deposits located in developing countries (primarily Brazil and the Democratic Republic of the Congo) and the associated environmental degradation have reached our collective attention. Consequently, it is now reasonable to treat the environment as having joined economic and social needs as a third dimension.

A further consideration is that theories, particular philosophical outlooks, and social movements, such as postpositivism, feminism and postmodernism, influence and can become embodied within stakeholders' perspectives, and hence within researcher perspectives. Categorization of alternative researcher perspectives usefully includes both the concepts of dimensions and of "unit of study." Phenomena may be observed at different levels of abstraction. For example, corporations or government agencies have multiple suborganizations and individual roles within them; the interests of humans playing roles within information systems can be considered at the level of each individual employee, of work groups, or of the employed workforce as a whole, and the interests of humans external to organizations can be examined at the level of the individual, the communities with which they identify, or society, variously at the level of a region or a nation. Understanding of environmental phenomena is similarly tiered, reflecting, for example, individual species within context, local biocommunities, regional biocommunities, or the biosphere as a whole.

In Table 2, a wide range of perspectives is presented, each of which sometimes is, or could be, and, we contend, should be, adopted by IS researchers in some circumstances. The alternative researcher perspectives are allocated to the dimension to which they relate, and are organized in descending order of abstraction.

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[3] https://en.wikipedia.org/wiki/Triple_bottom_line

[4] https://en.wikipedia.org/wiki/Coltan

Table 2: Researcher Perspectives within Dimensions and Levels of Abstraction

Economic dimension	Social dimension	Environmental dimension
The world economy	Humanity	The planet
A supranational region (e.g., EU, NAFTA)	The Chinese diaspora	Oceanic islands
A nation-state	A society	The troposphere
A regional economy	A city, province or state	An island ecosystem
A sector / value chain	A community	The biosphere; food chain
Strategic partners	A network of professionals	A biome
An organization	A person	A localized ecology
A suborganization	An online persona	A reproducing population

2.5 Single-Perspective Research

It is common for IS researchers to adopt the perspective of only one of the many possible stakeholders. This simplifies many aspects of the research, such as the formulation of the research questions or objectives, the design of the research process, the collection and analysis of data, and the expression of the findings. The results of the research are likely to be at least comprehensible to that stakeholder, and quite possibly also of interest, relevance, and value to them.

One actor is central to the operation of information systems, and is accordingly often foremost in the minds of IS researchers. In this article, *system sponsor refers to an organization (or entity or unit) that develops, implements, or adapts a system, process, or intervention, causes it to be developed or implemented, or for whose benefit the initiative is undertaken*

In such contexts as joint ventures and collaborative interorganizational schemes, the system sponsor may be a collective. In some cases, the perspective adopted by the researcher may be that of a category of organizations, such as those that install a particular ERP software package or adopt a particular category of application, such as electronic health record systems or cloud-based customer relationship management (CRM) services.

Our informal observation, which we further investigate in this article, is that, in a great deal of IS research, the research questions (or, in design science and action research, the research objectives) are formulated with the system sponsor's interests at least as the primary focus, and even as the sole set of interests that is recognized by the research design. The interests of all other stakeholders are then treated as potential or actual constraints on the achievement of the system sponsor's interests.

The focus on the system sponsor as a central player in an IS is evident in positivist empirical research, where observational studies, experiments, and surveys are conducted in order to understand the impacts of interventions from the system sponsor's perspective. In addition, a great deal of interpretivist research is also performed with the intention of providing the system sponsor with an understanding of those impacts.

In design science, the sense in which the term "design" is used is "the purposeful organization of resources to accomplish a goal" (Hevner, March, & Park, 2004). Most commonly, that goal is formulated in order to serve the interests of the organization(s) by or for which the intervention is made or the design activities are performed. In contrast, action researchers aim to ameliorate organizational problem situations for all relevant stakeholders (Davison, Martinsons, & Kock, 2004). However, action research that is informed by a critical or emancipatory epistemology may instead prioritize the interests of a single stakeholder group other than the system sponsor, such as employees or usees (Ledwith, 2016).

Business enterprises define objectives specifically in terms of the organization's own interests. This is "in the DNA," because the nature of the joint stock company is such that directors have a legal obligation to act in the interests of the company. In some cases, social and/or environmental interests may be directly commensurate with economic interests. In other circumstances, regulatory mechanisms as diverse as statutory obligations, activism among investors or employees, or public opinion amplified through the media, may provide an organization with good reasons to compromise its own economic interests in order to provide social and/or environmental benefits (Hedman & Henningson, 2016). Generally, however, the system sponsor treats the interests of other stakeholders not as objectives, but as constraints on the organization's achievement of its own objectives.

This is often problematic for the other stakeholders because their interests are generally different from, and to varying degrees opposed, to those of the system

sponsor, often in patterns that approximate a zero-sum game. Users and usees were discussed above as frequently having limited bargaining power, with the result that their interests are often marginalized.

Constantinides et al. (2012) note that "IS research practice involves choices about conflicting ends — implicit and explicit choices about what we value and what we (intentionally or unintentionally) pass over as relevant knowledge for IS research" (p. 2). Where multiple stakeholders exist, the decision by the researcher to privilege the perspective of one of the parties is tantamount to a political act, whether the researcher has made a conscious choice or is merely following the established lines of a particular research genre. Wall, Stahl, and Salam (2015) describe the phenomenon of unconscious hegemonic participation, which can be manifested in the dominance of common research topics, questions, theories, and methods, as well as beliefs about how research should be undertaken and research results interpreted. However, it is important to recognize that hegemonic participation may be conscious, with the researcher acknowledging, or intentionally adopting, and even espousing, the interests of a particular dominant stakeholder. In critical theory, it is assumed that the interests of the most powerful stakeholder dominate and are unlikely to be challenged, especially if it is also this stakeholder that underwrites the research funding (see Stahl, 2008).

The disciplinary institution plays a vital role in the establishment and maintenance of the hegemony. Many entrants to the IS research profession have previously undertaken undergraduate studies in IS, or have been exposed to large volumes of exemplars of IS research as part of their postgraduate programs, and have conducted research that conformed sufficiently with the discipline's norms to achieve recognized qualifications. Their teaching work is likely to impose on the next generation of students similar value judgments to those with which they themselves have been imbued. The expectations of editors and reviewers, and of selection and appointment committees particularly in business schools, have the effect of reinforcing a worldview that, we argue in this paper, is generally unenthusiastic about, unwelcoming, and even hostile to research that does not privilege the business perspective, but instead adopts a perspective other than that of the system sponsor, adopts more than one perspective, or adopts a perspective that is not on the economic dimension.

Even where a strong "business school" ethos is adopted and the interests of business are regarded as paramount, we contend that single-perspective research is problematic because it constrains the value that can be delivered to the researcher's client. Research undertaken from the perspective of any one participant is likely to, in effect, grasp one part of a large elephant, without gaining much of a feel for the remainder of the pachyderm. The conclusion might be reached that a particular system feature is beneficial to the system sponsor's interests, but it is unlikely that much insight can be offered into the intensity of opposition that the feature might engender among other stakeholders, how that opposition may be manifested, or how the impacts of that opposition might be mitigated. In short, for robustness and depth of insight to be achieved, the principle of triangulation needs to be applied not only to data sources and research methods but also to researcher perspectives. However, we recognize that including multiple perspectives within a single research article will, in some cases, be beyond the resources of the author team to manage and indeed the reviewer team to assess. An alternative approach is for author teams to consider how they can account for the various stakeholder perspectives across multiple papers in a stream of research.

It could be argued that the deficiencies in IS research that we are highlighting derive from the discipline's strong association with business schools and management disciplines. On the other hand, it appears that a degree of goodwill exists among management academics toward stakeholders other than the system sponsor, and toward dimensions other than the economic. Since the 1970s, "business ethics" has been a topic of discussion in business schools (Stark, 1993) and specialist journals have been in existence since the 1990s. The notion of corporate social responsibility (CSR) also emerged in the 1970s (Sethi, 1975; Wood, 1991) and has since been extended to corporate, social, and environmental responsibility (CSER). Meanwhile, the notion of "positive organizational scholarship" consolidated within the discipline of organizational behavior around the turn of the current century. This "is concerned with conditions that foster flourishing at the individual, work group, and organizational levels" (Dutton & Glynn, 2008, p. 69). Further, "the articles in [an *Academy of Management Review*] special issue [on Care and Compassion] open new windows [by humanizing] people working inside organizations" (Rynes et al., 2012, p. 505).

However, it is not entirely clear that such movements have much impact on business practices. Even if they do, recognition of them within the IS discipline is muted. By the end of 2018, the holdings of the AIS eLibrary had passed 40,000 papers, yet only four of them contained the phrase "positive organizational scholarship" anywhere in the text. Restraining the searches to title and abstract, only three contained "compassion," and only nine "business ethics." The term "corporate social responsibility" has attracted a little more attention, with 29 featuring the term in the title or abstract. However, a superficial inspection of these articles suggests a strong commitment to the

system sponsor's perspective, with themes such as "enhancing sustainability image," employer reputation, the effect of tweeting CSR on stock prices, and the relationship of CSR to corporate performance.

We offer the following example of how richer understanding might be achieved in the research domain of social media funded by advertising. Research from the system sponsor's perspective might adopt the following research question: *What proportion of social media users need to authorize the provider to exploit their data to ensure that advertising-based business models are viable?*

On the other hand, research conducted from the perspective of social media users might ask the following rather different research question: *What techniques and tools are available to social media users to enable them to obfuscate, subvert, or falsify their identities and locations in order to prevent the provider from exploiting their data?*

Such a question might, of course, be extended, e.g., to investigate perceptions of the ethicality of such activities or to examine the understandability and practicality of such techniques and tools. However, the example above is likely still on the economic dimension. The scope for IS to make impactful contributions on the social and environmental dimensions as well is attested to by scholars such as Tim et al. (2017), who developed "guidelines for response agencies and impacted communities to deploy social media for future disaster response" (p. 197) and Corbett and Mellouli (2017), who "present two real-world scenarios that allow [them] to illustrate the applicability of [their] model in building smart sustainable cities" (p. 448).

2.6 Dual-Perspective and Multiple-Perspective Research

In addition to the single-perspective approach, alternatives exist. A research question can be framed in a manner that internalizes tensions among competing interests and enables the emergence of insights of value to protagonists. A research question of this kind would be: *How do the attitudes of social media users and providers compare with respect to providers' terms of service and privacy policies?*

An example of research that recognizes this potential is Fletcher's paper (2003), in which consumer power, exercised, for example, through the use of ad-blocking software, has negatively influenced the impact of online advertising and business attempts to benefit from customer relationship management systems. The combination of two disparate perspectives into at least a research program, and perhaps even into a single research project, would be very likely to deliver better understanding than adopting either perspective in isolation.

Even where a stakeholder with a competing interest lacks power (such as the capacity not to adopt a feature, or to misuse it), the system sponsor may nonetheless benefit from dual-perspective research, because it can provide a more comprehensive understanding of the attitudes and likely behaviors of the various actors. This may also apply to the impacts on and behavior of indirectly affected parties, referred to above as "usees."

Many inter-, multi- and extraorganizational systems involve far more than two stakeholders. Beyond dual-perspective research, multiple-perspective approaches need to be understood, their benefits appreciated, and appropriate research techniques adopted and matured. Constantinides et al. (2012) drew attention to the advantages of reflecting more than a single perspective and, with it, the weakness of single-perspective research: "critical questioning of the ends of IS research brings into sharper focus the need to consider all possible relevant ends—and with it the greater good that researchers, as producers of knowledge, are striving to serve.... Complex individual and collective problems cannot be solved by uncritically accepting only one interpretation of relevance, at the exclusion and expense of others" (p. 2).

Examples of research questions that would deliver value to policy makers include: (1) *What are the social and economic impacts of social media's current business model?* (2) *What benefits and disbenefits would accrue to which stakeholders if regulatory measures were imposed on social media in order to achieve balance between the interests of providers and users?*

These kinds of multiple-perspective research questions do not represent the mainstream of articles published in IS research journals. Further, we do not suggest that they are likely to, or even should, simply replace the present dominant approach of single-perspective research. However, the risk exists that the value and impact of IS research may be significantly weakened if the discipline fails to develop techniques that facilitate the study of situations that are characterized by multiple interests and that provide insights into the concerns of the key players.

For example, in the context of international trade EDI, Cameron and Clarke (1996) addressed the research question: "What are the critical success factors for a project management framework for collaborative interorganizational systems, from the viewpoints of each of the players?" More recently, Agarwal et al. (2012) examined cybercollective social movements (CSMs) such as the use of social media in the "Arab Spring" of 2010-2012. After surveying the available research methods literature, the authors developed an analysis based on individual perspective, community perspective, and transnational perspective. The article

featured no system sponsor, but rather three levels of abstraction of the social rather than of the economic dimension. Another example is Selander and Jarvenpaa's study (2012), which expressly adopts the perspective of social movement organizations that work for changes in societies. Agarwal et al. and Selander and Jarvenpaa are noteworthy in being among only a small number of articles located by the research team in which the term "perspective" is used in a manner similar to that proposed in the present article.

The opportunity exists to extend research techniques whose focus is on the construction of artifacts into multiple-perspective research. The way has already been shown by action research, because it adopts "the idiographic viewpoint [whereby] any meaningful investigation must consider the frame of reference and underlying social values of the subjects" (Baskerville, 1999). Thus, Olesen and Myers (1999), in documenting the adoption of Lotus Notes by senior management at a university in New Zealand, experienced an action research failure when the interests of the system sponsor (the university) clashed with those of the personal assistants (users) of the senior university managers (usees): the users refused to apply the system, as it eroded their power to control their managers' diaries.

A similar approach can be adopted with design science. The accumulated understanding of sociotechnical thinking (Emery & Trist, 1960; Mumford 2000) can be applied in order to articulate what might be usefully described as "participative design science." Beyond asking: "What is a feasible and effective process for the design of a particular system or category of systems?" (see Guideline 3 of Hevner et al., 2004), research questions of the following form can be investigated: *What is a feasible and effective process for reflecting the perspectives of all parties in the design of a particular system or category of systems?*

Constantinides et al. (2012) argue that, in addition to seeking relevance to practitioners, IS researchers should consider "a whole range of entirely different and relevant ends for IS research with different audiences" (p. 2). These audiences include professionals, managers, executives, and company directors and, importantly for our argument here, policy makers in parliamentary, governmental, and advocacy contexts.

Once again, the ground has been prepared, in this case by critical theory research. This is inherently multiple-perspective in nature, being directly concerned with conflicts among the interests of the various actors, and with the power structures that determine the outcomes. It is also inherently instrumentalist, because it is conducted with the express intention of influencing the phenomena that are under observation (Klein & Myers 1999; McGrath 2005; Cecez-Kecmanovic 2001, 2005; Cecez-Kecmanovic et al. 2008).

While arguing for recognition of the desirability and benefits of dual- and multiple-perspective research, we acknowledge that this significantly increases the cognitive load, particularly on the researcher, but also on reviewers and editors, and finally on readers. Further, it adds to the challenges already faced in squeezing reports of research work into the limited space conventionally available in conference papers and journal articles. This raises the question of the extent to which dual- and multiple-perspective research can be applied within individual projects and the extent to which adoption needs to be sought in programs undertaken by moderately sized teams of researchers and reported in multiple papers published in a variety of venues.

3   The Modest Empirical Base

We found little evidence of prior work on the nature of researcher perspective, its consequences, and its application within IS research. We searched the literature in a number of ways. First, we searched using the key terms "perspective" and "research(er) perspective" variously with and without the qualifying term "information systems." Our primary search vehicles were Google Scholar, in order to access as wide a catchment area as possible, and the AIS eLibrary, in order to complement the generic approach with a large discipline-specific collection.

We encountered difficulties in identifying further terms likely to be correlated with the notions being examined, in part because many candidate terms were highly ambiguous. For instance, one such term was "stakeholder," particularly when used in ways that could reflect at least recognition of complexity and perhaps even an endeavor to address it. For example, the use of the plural form ("stakeholders") was considered more likely to indicate an approach relevant to our context, particularly if it was in conjunction with "interests" and "conflict."

Most uses of the term "research(er) perspective" merely distinguish between the interests of researchers on the one hand and professionals, educators or students on the other. Most uses of the term "perspective" in isolation relate to the theoretical lens adopted, although some relate to the interests of an actor within the research domain. The few cases found where the term relates to the angle of view adopted by the researcher are cited in the appropriate places within this article.

Although the term is not used, we perceive that the concept of "researcher perspective" is latent in the literatures on project success (DeLone & McLean,

1992; Seddon et al., 1999), project failure (Lyytinen & Hirschheim, 1987; Sauer, 1993; Heeks, 2002), and soft systems methodology (Checkland, 1981; Avison & Wood-Harper, 1990). The concept of "researcher perspective" can be inferred from the focus of these genres on the extent to which IS professionals (such as IS Project Managers, CIOs) recognize and manage the interests of a variety of stakeholders in an information system.

Action research (AR) necessarily involves the researcher paying careful attention to the interests of all stakeholders involved in the project. Searches of literature on AR techniques suggest, however, that the perspective of the researcher is seldom explicitly discussed. Implicitly, it is assumed that the approach is holistic in nature and hence agnostic to the values of specific participants and to the resolution of conflicts among them (Baskerville & Wood-Harper, 1996; Davison et al., 2004). Nevertheless, a careful reading of AR articles suggests that, in some cases, the values of different groups of participants are identified and hence that multiple perspectives are taken by the action researcher. Thus Wong and Davison (2018) identify the values of both employees (the knowledge exchangers) and management (the system sponsor) in their AR investigation into knowledge exchange practices in a global logistics firm. Indeed, we suggest that AR projects are more likely to be successful when they do consider the interests of all significant stakeholders and not only those of the system sponsor. As Davison, Martinsons, and Ou (2012) observed, an AR-based change that is designed exclusively from the perspective of management (the system sponsor) but is of little interest to employees, is likely to fail when it depends on the same employees' cooperation for implementation.

Guidelines in relation to critical theory research also include evidence of the "researcher perspective" notion. For example, Principle 2 of Myers and Klein's study (2011, p. 25) states that "critical theorists advocate values such as open democracy, equal opportunity, or discursive ethics." Meanwhile, Principles 4 and 5 argue for an orientation toward "individual emancipation" and "improvements in society."

A key exemplar in both the social dimension and the multiple-perspective approach is Agarwal et al.'s study (2012). Despite being an AIS prizewinner, this article accumulated only 35 citations in its first six years, suggesting that it sits outside the disciplinary mainstream. A second exemplar, also involving the social dimension and also dual-perspective in nature, is Lin et al.'s article (2015), which contrasts the interpretations of a system sponsor and the aboriginal people for whom the system was designed, but upon whom it was in effect imposed. This article evidences a similarly steady but slow accretion of citations. The

paucity of citations of these papers is consistent with our initial finding from the literature review that only a very small proportion of IS research addresses the matters at the heart of the present research.

In order to supplement the limited literature that we have been able to locate, we conducted a series of studies, initially of an exploratory nature and then in greater depth. The initial study was undertaken in support of a Keynote at the Australasian Conference on Information Systems (ACIS) (Clarke, 2015). It considered a sample of 36 papers from the previous year's proceedings, together with the 38 papers published during the same year in the *Australasian Journal of Information Systems* (*AJIS*). The research design and coding protocol was refined and then applied to a 19% sample (212 papers) of the corpus of Bled Conference Proceedings, 1991-2015. The results were reported in Clarke (2016).

A further and larger study was then conducted, utilizing the accumulated experience and the iteratively refined coding protocol. The focus of this study was exemplars of high-quality research, conducted on a variety of topics in IS and published in high-quality Basket of Eight journals that are readily accessible to IS scholars around the world. The rationale underlying these criteria was that articles of this kind are "leading," in the sense of being much used in the reading lists provided to postgraduate candidates, and are indicative of the kinds of papers that candidates should aspire to produce. For these reasons, we created a corpus of 659 articles from the AIS Basket of Eight journals. The corpus includes all articles that have substantial and direct relevance to a real-world stakeholder and that were published in the eight journals in 2001, 2008 and 2015. The Basket of Eight is, in effect, the repository of the discipline's "role models," whereby it refines and transmits its essence and achieves a degree of cohesion and compliance. The full research design and results, as yet unpublished, are available from the authors.

In our empirical work, we have taken a great deal of care with the critical step of coding the researcher perspective(s) adopted in each paper. Each article was examined as a whole, with particular attention paid to the title, abstract, introduction, and conclusions, seeking out information relevant to the research method, intended beneficiary, and target audience. Where an express statement about the researcher's perspective was found, this was noted but checked against other evidence within the article to ensure that the coding reflected the actual characteristics of the research. In the large majority of cases, however, no express statement was found, and the perspective had to be inferred by the coder. Key quotations were identified and used to categorize the article in accordance with a defined protocol.

4   Discussion

From the studies outlined above, a number of distinctive patterns emerged. In this section, these patterns are summarized and some key implications identified. The first aspects considered are the dominance of particular kinds of research, and a possible explanation for that dominance. This is followed by discussions of researcher values and behavior, impacts on the quality of IS research, and questions of disciplinary scope.

4.1   The Dominance of Particular Kinds of Research

Across the multiple studies that make up our (admittedly modest) empirical base, the articles that we evaluated were:

- very strongly (ca. 90%) single perspective in nature

- very strongly (ca. 90%) oriented toward the system sponsor

- dominated by the economic dimension (> 90%), with the social dimension visible in only a small proportion of articles and the environmental dimension entirely absent.

These findings suggest that IS researchers, for whatever reason, are scarcely interested in noneconomic, non-system sponsor research perspectives; alternatively, if this research is being undertaken and submitted, then it is either being published in IS venues that we have not studied and with which we are not familiar or it is being consistently rejected.

4.2   A Possible Explanation for the Dominance of Particular Kinds of Research

In our earlier theoretical discussion, we considered the vexed question of hegemonic participation. This may be unconscious, with the researcher adopting uncritically and unreflectively a perspective that is consistent with that of the hegemonic stakeholder. Alternatively, it may be conscious, with the researcher acknowledging and even espousing a value set associated with a powerful stakeholder.

In order to trace the rationale for the selection of perspective, we need to look further back to the motivation to undertake the research in the first place. If it is system sponsor-funded research, with the research question identified in collaboration with that system sponsor, then the logic is clear. However, much research is premised on the existence of so-called gaps in the literature. These gaps should, in principle, be

addressable from any of multiple perspectives. Moreover, as argued earlier, benefits would arise from adopting more than one perspective. Nevertheless, it is almost invariably the case that (1) a single perspective is taken, (2) this perspective is that of a real or hypothetical system sponsor, and (3) economic values prevail over social or environmental concerns. A tenable reason for this dominance is that IS researchers participate in and are, in many cases unconsciously, influenced by the dominant ideology, which is reinforced as they read prior literature to identify materials to support their arguments.

Breaking the shackles of this hegemony requires the acceptance of a competing narrative embodying alternative values. Although the economic dimension and system sponsors' interests are both legitimate and important, recognition is needed that social and environmental concerns also matter and that the interests of other stakeholders are also within the scope of research. Such sentiments can be detected within the IS literature, but work of this kind is not in the discipline's mainstream.

4.3   Researcher Values and Behavior

The dominance of single-perspective / system sponsor-only studies raises questions about the appropriateness of research behavior. First, it is clear that other perspectives (e.g., those of customers, employees, society, the environment) are scarcely reflected in research designs. Second, it appears that noneconomic and non-system sponsor perspectives are ignored, overlooked, or acknowledged as existing yet neglected. Third, and as a corollary, the omission of noneconomic perspectives from research designs is directly linked to the failure of these neglected perspectives to exert any significant impact on real-world practice. Taken together, these three implications firmly entrench the current economic and system sponsor hegemony.

A further consideration relates to the role of university-based researchers and the funding arrangements that support their research. Some research is industry funded or funded by research grants that specify industry partners as intended beneficiaries. In such circumstances, taking a system sponsor perspective is reasonable and appropriate. However, research that is funded by public universities or by public research funds would reasonably be expected to contribute to society generally since a large proportion of this funding comes from the public purse. If this contribution to society does not occur and the funding is appropriated in support of business interests alone, then the discrepancy between the source of funding and the identity of the beneficiaries of the research looms large: why should industry be the primary and even sole beneficiary of government-funded research, with all other interests receiving limited direct

benefits? We found it particularly troubling that so few articles in our sample considered the social dimension, and none considered an environmental perspective. Taken together, these data suggest that many university-based researchers may be essentially operating as publicly funded business consultants.

4.4   Delivering Research Value

Our findings further suggest that we are failing to grasp the opportunity to learn from other stakeholders' perspectives. Different stakeholders have different insights into phenomena. Single-perspective research focuses on the interests of only one stakeholder and is thus blind to the interests of all other stakeholders. As a result, it lacks the insights that could be obtained through dual- and multiple-perspective research. We contend that it is essential for researchers to be sensitive to multiple perspectives if their research is to deliver outcomes that are of value even for system sponsors, let alone for multiple stakeholders.

Therefore, working to the extent feasible within the current paradigm, we suggest that greater value can be offered by IS research if it applies the principle of triangulation not only to data sources and research methods but also to researcher perspectives. Economic perspectives need to be complemented by social and environmental perspectives that examine the interests of a variety of stakeholders, not only those of the system sponsors. Such an approach will ensure the realization of deeper insights by all parties into the needs of all stakeholders and will lead to more effective designs of systems, applications, and interventions.

We appreciate that the conception, design, and conduct of dual- and multiple-perspective research involves considerable challenges, for both researchers and reviewers. We accordingly do not argue that each researcher and research project conform to these suggestions. We do contend, however, that dual- and multiple-perspective approaches need to become much more common and that this can only come about if we, as IS scholars, recognize the need for this research, encouraging and nurturing the emergence of research techniques that support it.

4.5   Disciplinary Scope

Historically, the roots of IS research lie in the study of systems in which data were the raw material and work in process, and information was the product. In these early studies, the viewpoint of managers and executives was privileged. Until the mid-1970s, such systems were accessible only by government agencies and corporations of considerable size, but by 1980, individual end users had become one of the focal points for the IS discipline Hence, during the discipline's formative years, there was little incentive or scope to

consider perspectives other than that of the system sponsor, or dimensions other than the economic. As end users became increasingly independent, eventually owning their own devices, the research space changed and the opportunity to consider the user as a stakeholder emerged. In parallel, interorganizational systems became more common, such that partner corporations became more prominent stakeholders in information systems. As IT's impacts increased, a new recognition emerged that IS has impacts not only of an economic nature but also on social and environmental values.

However, although the potential for research into these impacts exists, these constitute opportunities that have not actually been realized. Instead, the IS discipline has retreated even further into its shell. Orlikowski and Iacono (2001) and Benbasat and Zmud (2003) proposed that the IS discipline be defined in terms of "the IT artifact," effectively removing from scope any non-IT-based activities. Alter (2003) counterproposed as the core concept the performance of "IT-reliant work," which removes from scope those aspects of IS that lie outside working contexts, such as domestic, hedonic, and consumer- or citizen-based arrangements. We find it perplexing that a discipline should consider marginalizing elements that are (1) vital parts of real-world systems, and (2) major factors in the success and failure of endeavors to intervene in those real-world systems.

We do not wish to return to the debates of two decades ago or more regarding the crises that beset the IS discipline, which have never been satisfactorily resolved and are indeed still with us. The new crisis is that the framework within which much IS research is conducted (i.e., the continued dominance of the single-perspective, system sponsor, and economic-dimension paradigm) is contributing to the ossification of the discipline. It remains frozen within a context that has long since passed on. The longer this situation persists, the more difficult it will be to extract ourselves from it. As an intellectual community, we need to accept and reflect in our research a far broader range of both applications and implications of IT-enabled information systems; we must also embrace a far larger and more diverse set of stakeholders.

Proposals have been made throughout the history of the IS discipline to sustain an open interpretation of the role of IS. For example, Clarke (1988) called for consideration of economic, legal, and social implications to be integrated with research in the application of IT, not segregated from it, and argued that "the closing sections of our papers must not be confined to "implications for further research," but must also directly address "implications for people" (p. 519).

Further, Galliers (2003) suggests that "an appropriate locus of IS study is more broadly based than organizations or individuals. Societal, policy and ethical issues might reasonably be included within the ambit of the IS field" (p. 342). Nunamaker and Briggs (2012) exhort the IS discipline to

> *expand our vision to embrace information needs and uses in all kinds of people and teams. Systems exist in a rich milieu of economic, social, political, cognitive, affective, and physical values, and are designed to create value for humans along all these dimensions. Studies of these perceptions of value are therefore also equal in importance to studies of technology* (p. 7).

Casual observation of the IS literature suggests that in recent years more IS researchers have become interested in both the social dimension and the conduct of dual-perspective studies. A noteworthy example is the *MIS Quarterly* special issue on "ICT and Societal Challenges." The special issue editors report in their editorial (Majchrzak et al., 2016) that a large number of articles were submitted and a substantial number accepted for publication. Further, the guest editors suggest that "IS researchers should relabel their practical implications section to policy implications. There is no reason to presume that managers of businesses are the only practitioners who can benefit from our insights" (Majchrzak et al., 2016, p. 275).

It appears that the momentum may be sustained, with recent arguments that "the study of strategy will be augmented by the strategy of social policy, regulation, and the law.... This will ... make us more valuable to our students and to society" (Clemons & Wilson, 2018, p. 5232) and "We live in a world today where different stakeholders, such as students, practitioners, venture capitalists, funding agencies, citizens, and government policy agencies, consume our research. Our research must provide value and benefit to these stakeholders in some meaningful way" (Wiener et al., 2018, p. 469).

In any case, do corporate board rooms, executives, and managers, whom some IS academics in business schools perceive as their clientele, really want researchers to adopt a narrow worldview, and thereby limit the scope of the information they provide, reducing business discipline journals to the level of an echo chamber? Among the three "core values" enunciated by the Association to Advance Collegiate Schools of Business, a business school must "(1) encourage and support ethical behavior by ... faculty, … and (3) demonstrate a commitment to address, engage, and respond to current and emerging corporate social responsibility issues ... through its ... research" (AACSB 2013, 6-7). There is a strong countercurrent against narrow conventionalism. Single-perspective,

system sponsor, economic-dimension research is only part of the appropriate field of view. The hitherto missed opportunity urgently needs to be taken up.

5 Conclusion

Our motivation for commencing this research was our informal observation of the dominance of system sponsors' interests in IS research. We also noted the apparent absence of the notion of researcher perspective from the debates about the "core" of the IS discipline, stimulated by such senior scholars as Benbasat and Zmud (2003) and Walsham (2012).

By conducting several studies, including one of three complete years of all Basket of Eight journals, we found the dominance of the system sponsor's perspective to be remarkable. We further suspect that our findings would be replicated across the total population of articles in the same eight journals since their inception, and suspect that the IS literature as a whole may not be markedly different.

Why should one researcher perspective dominate all others? We have suggested reasons for the dominance of the systems sponsor perspective, which are entangled with the longstanding commitment to an economic justification for research. We contend that we need to open up the debate about this phenomenon. We challenge the IS community in general, and journal reviewers and editors in particular, to increase their awareness of researcher perspective, and to seek ways to encourage what can only be described as abnormal perspectives that lie outside the current hegemony, such as those of users, usees, ecosystems, and other nonhuman stakeholders. Reviewers have a particularly important role to play because they can encourage authors to be more reflective in their research designs and incorporate perspectives that go beyond economic analyses, even if only in their recommendations for future research. This is not as radical as it may seem because triple-bottom-line reporting is already well established and so the legitimacy of noneconomic values is already recognized, even within the business community.

In this article, we have argued that a new approach to IS research is needed, one which balances the interests of multiple perspectives. This new approach needs to be communicated to and accepted and acted upon by a critical mass of early adopters who accept its legitimacy and push for its more widespread adoption. We acknowledge that the changes associated with the promotion of this new approach could lead to a further splintering of the IS discipline: a group of researchers might break away to form a new subdiscipline with its own conference(s) and journal(s). Such subdisciplines already exist, notably under the IFIP umbrella, namely Technical Committee 9 (ICT and Society) with working groups such as WG9.2 (Social Accountability and

Computing), WG9.4 (Social Implications of Computers in Developing Countries), and WG9.9 (ICT and Sustainable Development). For instance, IFIP WG 9.9's website [5] encourages the investigation of "interaction among social, environmental and economic issues in the development of ICTs and their applications." These or other communities of practice (Wenger, 1988) might provide a venue where a new subdiscipline could emerge. We contend, however, that such splintering would be a loss for the IS discipline.

As a guide to individual researchers who wish to diversify their research designs yet remain within the mainstream, we offer the following prescriptive advice. We suggest that they should recognize researcher perspective as an important element of research conception, design, conduct, and reporting. This will require deliberation about the alternative perspectives that may be relevant in the specific context under investigation. As a result of that deliberation, researchers will need to determine which perspective(s) to adopt. At various points in an article, but particularly in sections dealing with its motivation, method, discussion and conclusions, authors should refer to the perspective that they adopted. Formal structuring of this kind may seem unwieldy and labored at first but, in time, will be accepted as simply part of how research is undertaken and reported.

We contend that journal editors and reviewers need to recognize the risks of stasis in disciplinary norms and adapt their policies and practices in order to embrace greater plurality of both researcher perspectives and the dimensions on which those perspectives lie. They also need to demonstrate tolerance in relation to methodological issues since, otherwise, excessively high hurdles will continue to obstruct the emergence of effective techniques for dual- and multiple-perspective research.

A practical step that editors and reviewers can take is to ensure that all submitted research articles explicitly identify the implications beyond the IS research community, including implications for stakeholders, society, and/or the environment. Clarke (1988, p. 518) argued that "economic, legal and social implications of information technology must all be considered together, to enable the various factors to be seen in perspective." By documenting these different implications, we can raise awareness of their importance more generally and thereby encourage researchers to consider their own research designs more carefully. Future meta-analyses could consider how journals and their editors have approached this challenge.

A further important contribution can be made by senior members of the discipline within their own schools and strategic partnerships. The need to establish a publishing record and reputation and achieve tenure make it unwise for early-career academics to invest too much of their time challenging the boundaries of the discipline. On the other hand, senior, tenured professors are not as heavily constrained. They should accordingly ensure that the research programs that they run and the larger-scale funding sources that they tap encompass not only the current mainstream but also a sufficient diversity of parallel and countercultural work, which can deliver a plurality of views and multifaceted triangulation.

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[5] http://ifiptc9.org/wg9-9-ict-and-sustainable-development/

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