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The open academic: Why and how business academics should use social media to be more 'open' and impactful

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Abstract   The mission of *Business Horizons* is to publish research that practitioners can understand to help them change their thoughts and actions. However, this mission remains an elusive ideal for many business school academics as they struggle to overcome the research-practice gap. To help scholars bridge this gap, we present social media as a boundary-spanning technology to be open to connecting with, learning from and working with academics and other stakeholders outside their field. Social media can be used as a boundary-spanning technology to help bridge the research-practice gap. To support this idea, we present a process model of five research activities—networking, framing, investigating, disseminating, and assessing—and describe how social media can make each activity more open. We present a framework of four social media-enabled open academic approaches—connector, observer, promoter, and influencer—and outline some do's and don'ts for engaging in each approach. We also discuss the potential dark side of openness through social media and offer some coping strategies. As per the mission and scope of *Business Horizons,* this article aims to help business academics rethink and change their practices so that our profession is more widely regarded for how our research positively impacts business practice and society in general.
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1. Why academic openness matters

A case for more academic openness can be built from knowledge about open innovation (Bogers

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et al., 2017; Chesbrough, 2003) and open science (Beck et al., 2022; Vicente-Saez & Martinez-Fuentes, 2018). Open innovation approaches innovation by involving "purposive inflows and outflows of knowledge across the boundary of a firm in order to leverage external sources of knowledge and commercialization paths, respectively" (Chesbrough & Bogers, 2014, p. 16). This definition underlies open science, which calls for more transparent scientific practice and for broader networks to share and develop knowledge (Fecher & Friesike, 2014). Both open innovation and open science emphasize quality, productivity, and impact benefits to sharing with and learning from sources outside of our disciplines, organizations, industries, and communities. Because digital innovations such as social media have increased openness in corporate innovation practices, we observe similar opportunities for academic research practice. This article aims to explain how academics can use social media to be more open in conducting and publishing research that practitioners can better understand, value, and use. We do this by building on our own research into organizational openness in the context of innovation and sharing our experiences with using social media for academic openness. To understand how social media enables academic openness, we now need a clear definition.

Academic openness is a research orientation that leverages insights and expertise from different academic and nonacademic stakeholders to co-design, co-produce, and co-assess research that advances academic inquiry and impact. Like engaged scholarship (Van de Ven & Johnson, 2006), academic openness is not about shifting from basic to applied research or sacrificing rigor for relevance. Openness is about carefully advancing an academic field without being so immersed that we do not achieve our goal of expanding knowledge that benefits society (Hoffman, 2021). It promotes knowledge flows among individuals within and across organizations and across disciplinary boundaries (see Beck et al., 2022; Bogers et al., 2017; Chesbrough & Bogers, 2014). Sharma and Bansal (2020) provided an example of academic openness in their study of how engagement between researcher and manager can frame research on business sustainability. They argue that for research to better impact both research and practice, researchers need to conduct research with practitioners.

We join the call for business academics to be more open like this as a way to combat what is typically an overly closed research approach. Business academics are trained to develop and publish impactful research in business journals and are rewarded for doing so. Furthermore, our reward systems traditionally focus on field-specific metrics, such as citation counts and publications in lists of ranked journals. Such factors shield us from being open to different sources and audiences for knowledge flows. Our profession is often referred to as an Ivory Tower, where we are cut off and protected from parts of the world to pursue uncontaminated academic inquiry. However, this isolation can also lead to an incestuous closedness and poorer understanding of not only the world's problems but also our ability to address them.

We propose several reasons for business academics to combat this closedness with more openness:

- Openness helps us better identify and formulate problems in business using knowledge from those who experience the issues, rather than those who merely study them.

- Engagement with a greater range of stakeholders and expertise helps us draw upon their perspectives, theories, and methods to co-design research that addresses important questions and problems (Van de Ven & Johnson, 2006).

- Openness pushes us to frame our intellectual ideas and technical research findings in ways that resonate with and are more accessible to practitioners, policymakers, and the public. Given that many of us have our salaries and research funding paid by taxpayers, we have some obligation to work on issues that will benefit the public. This also involves making more of our work transferable and accessible.

- Addressing some of the world's grand challenges requires openness in utilizing different academic, policy, and business expertise to solve complex global challenges (McGahan et al., 2021; Omenn, 2006).

Many business academics aim to produce and share impactful research with broader stakeholders. They know social media can help with this duty but do not understand how to use these digital technologies effectively. In the next section, we explain why and how business scholars can use social media to promote their research and be more open to connecting with, learning from, and working with academics and other stakeholders outside their academic field. We outline how social media are boundary-spanning

technologies for these activities. We explain and illustrate how using social media in this way can result in collaborations, projects, data sources, and publication opportunities that have the potential for business practice to shape theory that changes practice. While these ideas are intended for business academics—from doctoral students to senior professors—they will likely be relevant to academics in many other fields, too. They should also appeal to academic leaders such as Michael Murphy (2021), who, as President of the European University Association (EUA) that represents more than 850 universities, recently stated that "openness is key for the success of universities in the new decade."

2. Social media: A tool for academic openness

Social media uses "mobile and web-based technologies to create highly interactive platforms via which individuals and communities share, co-create, discuss, and modify user-generated content" (Kietzmann et al., 2011, p. 241). This functionality has led to platforms for blogging (e.g., Blogger), microblogging (e.g., Twitter), networking (e.g., Facebook, LinkedIn), photo and video sharing (e.g., Instagram, Pinterest, YouTube), and discussion forums (e.g., Redditt; Boyd & Ellison, 2007; Kaplan & Haenlein, 2010). Given their reach and the ease of using such technologies, many academics now use social media to disseminate their research and promote themselves and their institutions (Harseim & Goodey, 2017). Such academic social media use can increase the number of times an article is viewed (Widmer et al., 2019) and cited (Peoples et al., 2016) as well as its impact on nonacademic stakeholders (Liang et al., 2014) and the level of trust in research (Huber et al., 2019). This type of social media use can help scholars, especially junior ones, generate meaning from their work and overcome concerns that their profession "is a 'bullshit job' that provides little social value" (Bothello & Roulet, 2019, p. 854). We now explain how social media can be used not only for disseminating, but also for the networking, framing, investigating and assessing aspects of research.

Drawing on research that outlines the functionality of social media (Kietzmann et al., 2011) and its value to researchers (Bogers, 2021; Carrigan, 2019; Hoffman, 2021), we list some of the major

social media and outline how researchers can use them to be more open academics (see Table 1). These technologies allow us to do more than just promote our research and ourselves. Social media can change how we network and converse with each other, and how we learn and share knowledge. In fact, we, the authors of this article, discovered and interacted with each other via Twitter back in 2012. From these interactions, we collaborated on articles, journal special issues, workshops, and conferences. We have also used social media to fruitfully engage with scholars and other stakeholders outside of our academic fields to co-produce ideas, projects, and results that exceed our individual capabilities.

Just as open innovation can be characterized as obtaining, integrating, and commercializing new external knowledge sources (West & Bogers, 2014), academic openness also comprises interdependent steps. To explain how social media can facilitate openness in business research, we introduce a process model of five major research activities: networking, framing, investigating, disseminating, and assessing (see Figure 1). While these five activities are listed in an order that reflects a typical research life cycle, it is not unusual for research projects to start at different points and iterate between them. For example, it is common for networking and framing to happen during other stages of the research cycle. To help explain Figure 1, we refer to recent research on bullshit in the workplace published in *Business Horizons* by one of the authors (McCarthy et al., 2020). We now describe each research activity in Figure 1 and how social media was used to make each activity more open.

2.1. Networking

The first activity in Figure 1, networking, is essential to academic life. Traditionally, scholars use academic conferences to meet other scholars and form productive collaborations. However, scholarly networking is no longer limited to in-person forums. Social media allow us to connect with different stakeholders almost anywhere and exchange semi-synchronous messages about work-related issues. We can follow individuals in and beyond our field. Social media technologies help expand our horizons by connecting us with people we may not personally know but are fascinating and seem to share our interests. Networking is often a reciprocal activity; the more we follow and engage, the more others will do the same.
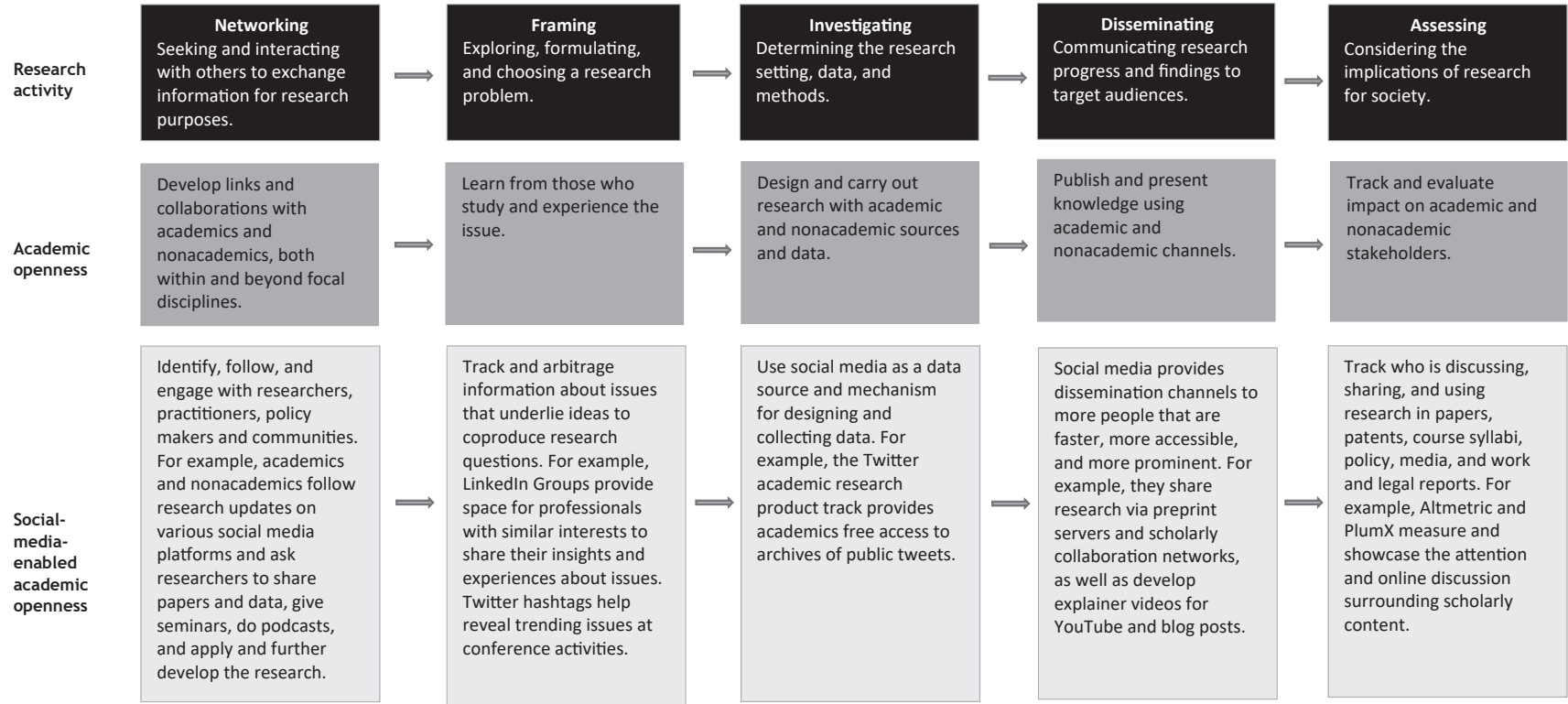
Table 1. Social media for open academic use

Type of social media		Open academic use	Examples
Mainstream social media	Blogs	Websites for academics to present information about their research.	• Blogger • WordPress • Wix • Medium
	Podcasts	Platforms for spoken-word broadcasts where digital audio files are posted and accessed via personal playback devices.	• Apple Podcasts • Spotify • Google Podcasts • Audible • Stitcher
	Comprehensive social media platforms	Platforms for conversing, sharing content, revealing where you are, establishing relationships, developing reputations and forming groups.	• Facebook • Twitter • YouTube • LinkedIn • Reddit • Instagram
Academic oriented social media	Pre-print servers	Repositories for posting early versions of research work that has not yet been accepted for publication by an academic journal.	• National Bureau of Economic Research (NBER) • Social Science Research Network (SSRN) • EconPapers
	Scholarly collaboration networks	Platforms where academics can interact, develop collaborations, and share research results.	• Academia.edu • Researchgate • CiteULike • Mendeley • Figshare
	Academic oriented news platforms	Online media where academics publish news stories and opinion pieces on (or drawing on) research.	• Conversation • Medium • PsyPost
	Identity and impact assessment tools	Digital tools for searching and identifying published academic work and assessing its influence within and beyond academia.	• Orcid • Google Scholar • Scopus • Altmetric • Microsoft Academic • PubMed • PlumX • Paperbuzz • Impact Story

Consider the research on workplace bullshit as an illustrative example. With social media such as Twitter and LinkedIn, networking involved following and learning from scholars working on bullshit in the fields of business (e.g., @andre_spicer, @work_-matters, @RascheAndreas), psychology (e.g., @GordPennycook, @MetacogniShane, @JohnVPetro), information science (e.g., @jevinwest), evolutionary biology (e.g., @CT_Bergstrom), and political science (e.g., @jrhopkin). It also involved learning from journalists (e.g., @lucykellaway), consultants (e.g., @berkun), and business leaders (e.g.,

Figure 1.   **Process model for social-media-enabled academic openness**

Research activity	**Networking** Seeking and interacting with others to exchange information for research purposes.	**Framing** Exploring, formulating, and choosing a research problem.	**Investigating** Determining the research setting, data, and methods.	**Disseminating** Communicating research progress and findings to target audiences.	**Assessing** Considering the implications of research for society.
Academic openness	Develop links and collaborations with academics and nonacademics, both within and beyond focal disciplines.	Learn from those who study and experience the issue.	Design and carry out research with academic and nonacademic sources and data.	Publish and present knowledge using academic and nonacademic channels.	Track and evaluate impact on academic and nonacademic stakeholders.
Social-media-enabled academic openness	Identify, follow, and engage with researchers, practitioners, policy makers and communities. For example, academics and nonacademics follow research updates on various social media platforms and ask researchers to share papers and data, give seminars, do podcasts, and apply and further develop the research.	Track and arbitrage information about issues that underlie ideas to coproduce research questions. For example, LinkedIn Groups provide space for professionals with similar interests to share their insights and experiences about issues. Twitter hashtags help reveal trending issues at conference activities.	Use social media as a data source and mechanism for designing and collecting data. For example, the Twitter academic research product track provides academics free access to archives of public tweets.	Social media provides dissemination channels to more people that are faster, more accessible, and more prominent. For example, they share research via preprint servers and scholarly collaboration networks, as well as develop explainer videos for YouTube and blog posts.	Track who is discussing, sharing, and using research in papers, patents, course syllabi, policy, media, and work and legal reports. For example, Altmetric and PlumX measure and showcase the attention and online discussion surrounding scholarly content.

@elonmusk), who wrote and shared views on the challenges of dealing with workplace bullshit. This networking, enabled by social media, resulted in connections, access to online conversations, and insights that fed into and guided other activities in Figure 1.

2.2. Framing

The second activity in Figure 1 is framing. This often leverages the connections and knowledge gained by networking to explore, formulate, and select research ideas and problems to be studied. Such framing was highlighted in a *Business Horizons* editorial explaining how impactful research relies on a great idea that often comes not from gaps in the research literature, but from conversations with practicing managers and scrutiny of the media (Fisher, 2022). Researchers used social media to learn from scholars who study, journalists who report on, workers who experience, and leaders who want to combat workplace bullshit. Social media allowed the researchers to be more

open to finding and combining different views about workplace bullshit's causes and consequences. Insights from not only academic literature, but also news articles, blogs, and white papers were used to frame research on how leaders influenced the production, acceptance, and spread of bullshit.

2.3. Investigating

The third activity in Figure 1 indicates that social media can also help open the investigating aspect of research. For example, Twitter is a source of data about behaviors and attitudes, and the demographics of the populations voicing or engaging in them (McCormick et al., 2017). In fact, Twitter released the Academic Research API (application programming interface) to allow researchers free access to archived tweets. This social media approach to investigation is more open, real-time, and global, and the use of hashtags in social media can make it easier to search for, collect, and sort data. Social media can also be

Table 2.   Social-media-facilitated open disseminating and open assessing

Stages of research article output	Social-media-facilitated open disseminating	Social-media-facilitated open assessing
Publication acceptance	• Announce publication acceptance to networks (and groups within) using Facebook, Twitter, LinkedIn, etc. • Share unpublished versions to pre-print servers and scholarly collaboration networks.	• Develop goals and measures for your approach to social-media-enabled academic openness (see Table 3). • Use sites such as Altmetric and PlumX and track social media interest in your research topic and publication. • Track and engage in conversations about your research and its topic. • Host and curate online forums to share, explain, advocate, and learn about the interest in your research. • Be social and create online social capital that brings attention to your research.
Publication is assigned a Digital Object Identifier (DOI)	Referencing the DOI, create media and messages for different audiences that bring attention to the publication by: • Developing a slide deck for sites such as SlideShare and Scribd; • Producing informational postings for a personal blog or web page, and sites such as the Conversation, Medium, and PsyPost; • Creating and posting a video explainer using sites such as PowToon; and • Producing a recording for a podcast and with other shows.	

used to prototype research investigations. For example, the research on workplace bullshit created a scale to gauge employee perceptions of bullshit prevalence in the workplace (Ferreira et al., 2022). Social media platforms publicly pre-tested and got feedback on the definition, dimensions, and scale items of the workplace bullshit in use.

2.4. Disseminating

The fourth activity in Figure 1 is currently the most obvious application of social media for academic openness, namely its use for disseminating. Disseminating via peer-review publication is a fundamental and open academic research practice; however, it is just openness between academics, as other stakeholders cannot reasonably access the publications or understand such knowledge. Social media facilitates increased dissemination via better accessibility to discovering, retrieving, and understanding the knowledge. For example, blogging and tweeting about our research augment the more closed journal channels traditionally used to share our research outcomes. Furthermore, if we are serious about impact, it is worth noting that it is not always an explosive one-off dissemination act; it is an ongoing and connected series of open engagements with academics, practitioners, policymakers, and the public. As such, social media has the additional benefit of allowing us to not only disseminate the outcome of our research, but also explain more about the process of how it came about. Table 2 explains what social-media-facilitated open disseminating and assessing can involve in various stages of the publication process.

2.4.1. Stages of the research article output
The first column in this table outlines two key stages in the publication of a journal article. When a manuscript is first accepted, we should let our networks and the public know, as these initial dissemination activities are to both celebrate and notify. To avoid such dissemination being perceived as braggadocious, think carefully about the purpose and tone of the announcement. Disseminate with confidence and erudition to share insight without drawing inappropriate attention to yourself. Be guided by the primary mission of a business academic: to do and disseminate rigorous, good quality research to better the business world and management profession (Fisher, 2020). In addition to one's own work, it may also be opportune to see this as part of a broader amplification of others' work and promotion of a knowledge domain (Bogers, 2021).
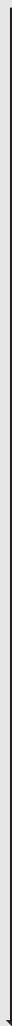
Second, we can consider the dissemination activities when a journal article is assigned a Digital Object Identifier (DOI). A DOI is a unique and permanent online code that identifies and provides access to the publication landing page. It makes it easier for people to find, track, and contribute to the online attention a publication receives. Once an article has a DOI, it can be embedded in different media objects about the research (see the second column of Table 2). These media objects include creating and sharing slide decks, producing informational postings for blogs, and even producing short videos that summarize the work. This dissemination approach helps the research aspect of other podcasts and media coverage. Furthermore, the DOI insertion in media objects helps the assessing activity in academic openness. The DOI is an identifier for measuring the attention and influence of a piece of research, and the Open Researcher and Contributor ID (ORCID) uniquely identifies researchers and their work for both disseminating and assessing purposes.

2.4.2. Social-media-facilitated open disseminating
As exemplified by the workplace bullshit article, once this research was assigned a DOI, several slide decks were posted to SlideShare. A 3-minute video explainer was also created using PowToon and then posted to YouTube and the journal's video collection. A post was created for one of the researchers' blogs and an article for the media outlet Conversation (McCarthy, Hannah, & McCarthy, 2020). Twelve months after this initial dissemination, this *Business Horizons* research on workplace bullshit appeared in several podcasts and radio interviews and was discussed in over 20 media and blog articles by journalists and practitioners. Many managers also posted images and statements via social media about how their companies were distributing and using the research article.

Another social-media-enabled open dissemination activity is hosting online debates about research. For example, the Ask Me Anything (AMA) forums on Reddit allow anyone to host a question-and-answer session. Academics who act as AMA hosts to discuss their work have found these forums highly effective for open-dialogue-based public engagement (Hara et al., 2019). Furthermore, imagine how frustrating it is to try using social media to promote such a forum or traditional speaking event when the researcher does not have a Twitter or LinkedIn account. Being a social media hermit does not promote impactful academic openness.

Table 3.   Approaches to social-media-enabled academic openness

Approach	Some do's	Some don'ts	Type of social media use & level of academic openness pursued
Observer • Passively follows, monitors, collects, and curates content related to their research. • An academic wallflower that rarely engages beyond liking and resharing.	• Consider how and why you follow; • Determine what you want to learn from them; and • Like and reshare content that fits your research and career strategy.	• Forget the social in social media and be too ghost-like; • Like and reshare content you can't explain why you did so; and • Underestimate the limitations of not actively sharing and helping.	Passive and limited
Connector • Connects, follows, and consorts with those related to their research. • Collects friends, followers, and contacts.	• Consider who to connect with and what sort of relationship to expect; • Consider if you are connecting for personal and/or strategic reasons; and • Identify and join research relevant lists and groups.	• Expect a network to build itself; • Excessively and indiscriminately connect and disconnect; and • Be afraid to venture outside your field.	
Promoter • Promotes themselves, their research, and their institutions. • Seeks to make a difference to themselves and their academic communities.	• Know your audiences, the channels, and the hashtags to engage with them; • Follow and add to conversations about the issues to help build awareness of you and your research; • Consider the sequence and timing of promotions using Twitter, SlideShare, blogs, video explainers, etc.; and • Offer open access options to your research.	• Replace human engagement with robotic, automated interactions that can be spam-like and pushy; • Neglect rigor, integrity, and nuance in favor of sensationalism, exaggeration, and hyperbole; • Forget to translate your contributions to suit different social media platforms and different; • Ignore that online audiences are not merely passive consumers of knowledge but can also be active co-creators of it; and • Don't drink and post or, more generally, avoid impulsive and/or sloppy posts.	
Influencer • Actively advocates, educates, and persuades to make a difference to their field and society.	• Take a public position on your research and hold true to your contributions; • Determine who you want to influence and the outcome you want; • Use compelling images, videos, and captions for the platform and the desired audience outcome; and • Track and assess engagement-outcome effectiveness.	• Ignore relevant questions and feedback, and be tricked into thinking you know more than you do; • Engage with, confront, and conduct endless debates with trolls; • Forget who your audience is and how they relate to your impact goals; • Forget to make your contributions meaningful; and • Forget to experiment and learn what does and doesn't work.	Active and full

2.5. Assessing

The final activity in Figure 1 and the third column in Table 2 deal with how social media can make assessing research more open. Business academics have been driven by scholarly impact (i.e., how their research impacts other academics, as measured by citation counts). But increasingly, there are calls for business academics to be more open to what constitutes impactful research by considering their work's practical, societal, policy, and educational impacts (Wickert et al., 2020).

For effective assessment, it is important to understand the differences between dissemination, attention, and impact. Social-media-enabled dissemination is how we share and spread our research online. It is what, where, and how we post online. This dissemination results in attention, or the extent to which online posts are seen, liked, reshared, and discussed. From this attention comes impact, or the extent the research is cited and used to change how people think and act. Using Altmetric and PlumX is a social-media-enabled way to assess attention and impact.

Altmetric and PlumX assess online interest in research with a DOI via mentions in sources such as journal articles, blogs, data sets, policy documents, Wikipedia, and more. Consider the research on workplace bullshit: Altmetric reports that, as of May 1, 2022, this work was mentioned in 14 news outlets, two blogs, 1,113 tweets, two Wikipedia pages, 17 citations, and 119 Mendeley accounts. In terms of Altmetric scoring, this places this *Business Horizons* article in the top 5% of all research outputs across all journals for all academic disciplines (i.e., ranks 11,851 of 21,002,850 articles). It is also the highest-scoring Altmetric output ever in *Business Horizons* (i.e., number 1 out of 826 articles). These digital impact scores provide researchers, their institutions, and journals some evidence on how a journal article is being shared and discussed, and by whom, within and beyond academia. Such assessment scores complement other social-media-related measures for academics and their work, such as the number of followers, downloads, views, and listens. There is also evidence that such social-media-driven Altmetric-type impact measures link to traditional academic citation measures (Luc et al., 2021).

3. Approaches to social media for academic openness

We now introduce a framework of four approaches to academic openness via social media, along with advice for engaging in each approach (see Table 3).

The four approaches are connector, observer, promoter, and influencer, and vary regarding the type of social media use (i.e., active to passive) and their pursuit of academic openness elements in Figure 1 (i.e., limited to full). Each represents role archetypes that academics can assume with respect to their use of social media for academic openness. These roles are shaped by an academic's personality and seniority in their career, as well as their experience with social media and open scholarship.

3.1. The observer

Of the four approaches, the observer is the most passive in social media use and limited for openness. It involves using social media to monitor and learn about trends and events. The researcher's associated learning comes from pursuing comprehensive information and contemporary knowledge (Maggitti et al., 2013). However, it is boundary spanning that requires framing and investigating activities in a relatively detached way. The risks and costs of this approach are the lowest, as is the potential to produce research benefitted by openness. It's likely the observer approach will initially suit junior academics who are new to social media and open scholarship. It could also be a steppingstone toward practicing one or more of the other three approaches.

3.2. The connector

The connector approach builds on the observer approach by being less passive and more open. It involves using social media to find, connect, and interact with both academics and nonacademics, actively networking to do the framing, investigating and disseminating activities. Academics who use social media accordingly will connect better with heterogeneous stakeholders, leading to new sources of knowledge that create a "vision advantage" (Burt, 2004, p. 359). This approach is somewhat active, making the risks, costs, and benefits expectedly greater than those of the observer approach. The connector approach will likely be appropriate for academics looking to explore, connect, and share more freely as part of their research. It will also be for academics who enjoy fostering accessible and beneficial research ties with more varied stakeholders.

3.3. The promoter

The promoter approach is relatively active as academics use social media to showcase themselves and their work. However, the scope of openness and impact can be constrained to the promoter's field

and their institution, instead of other societal stakeholders. More specifically, promoters advertise themselves and their work and practice the assessment element of Figure 1 to evaluate visibility. A strong promoter and connector approach parallels human peacocking in which we display status and affiliation to others (see the Twitter account @HumanPeacocking). If well executed, promoting and connecting will be an effective *peacock-or-perish* tactic for conveying academic progress and standing. However, if poorly implemented, the outcome can be viewed as a form of academic narcissism, which we elucidate in the next section. The promoter approach will likely suit productive academics who have social media experience and are not shackled by severe modesty.

3.4. The influencer

The influencer is the most active and open of the four approaches. It involves using social media to be more open in networking, framing, investigating, disseminating, and assessing. The influencer cares about engagement-induced impact and is actively open to taking a stance, making a difference, and evaluating the effect of their influence. They advocate that research can significantly impact practice if influencers involve, learn from, and work with managers and other stakeholders throughout the process (Sharma & Bansal, 2020). Influencers carefully engage with social media to learn about, develop, and bring awareness to issues, not themselves. Because it is the approach with the greatest risks and benefits, it is suited to academics who have the support, resilience, and suppleness to bridge and exploit the different logics for defining problems and creating solutions within academia and business. They are or can identify and work with boundary spanners. Academic boundary spanners are individuals who act as brokers or lynchpins to search for, screen, and apply knowledge to society's problems in adaptable ways. They are effective at finding and utilizing practical insights about problems for rigorous, high-quality knowledge creation.

Each of the four approaches involve a different level of social media use and pursuit of academic openness. Individual academics should find an approach that suits them best by considering who they are, how they see themselves as academics, and what they want to achieve. This decision will then have to be calibrated to fit the academic's institutional mission-reward context, as we discuss in the next section. At the same time, these approaches are likely not mutually exclusive and may change over time. An individual academic could engage in more than one approach at any time, and in multiple approaches over time. As noted previously, this will depend on an academic's personality, status, seniority, experience with social media, and commitment to more open, impactful scholarship. As these factors for an individual can evolve, individuals' approaches typically advance from the most passive and least open (i.e., observing) to a combination of multiple approaches, to practicing the influencer approach in a way that leverages the other three. In any case, we recommend academics be aware of the approach(es) they have or want to have. In Table 3, we present some do's and don'ts to help them with this goal.

4. The dark side of social-media-enabled openness

Our final advice for using social media to be a more open academic is considering its dark side (Baccarella et al., 2018). With the opportunities and benefits outlined in this article come risks and costs. To identify these hazards, we consider relevant research, expand on various do's and don'ts in Table 3, and reflect on our social media and open academic experiences. We also used social media to solicit views from academics, among others, about the perceived risks and costs of using social media for more open scholarship (see McCarthy, 2022). It is important to note that social-media-enabled academic openness is not by itself deleterious; however, it can intensify propensities toward harmful behaviors inherent to our profession, the impact agenda, and life in general. The four major concerns are as follows.

4.1. Time drain

A common worry is how long it can take to not only learn and use social media, but also practice being a more open academic. This is compounded by the fact that you might enjoy using social media to pursue openness so much, you become hooked on the engagement, attention, and feedback. The limitless discovery prevalent in social media openness also leads to getting sidetracked with interesting people and postings, which may be distracting and provide limited added-value to your research. Dealing with this risk requires the same disciplined, goal-directed time and attention management central to most forms of effective

boundary spanning for innovation (Bluedorn & Standifer, 2004; Davenport & Völpel, 2001). It is important to establish the appropriate amount of time spent using social media for research and consider device applications that measure use and set limits. Plus, "academic life is not a pie with one slice for research, one for engagement, one for teaching. It's a soufflé in which you put all those ingredients in, and you wait for them to grow" (Roulet, 2018).

4.2. Academic narcissism

One key capability of using social media to bridge research and practice is the ability to reach different sources of information and audiences. This capability is attained by the platforms having business models and algorithms that drive online popularity. On one hand, pursuing online engagement and attention aligns with the academic agenda of being more open and impactful. However, there can be drawbacks, too. For example, researchers may wish to avoid having too high a Kardashian Index (i.e., the K-Index named after media personality and socialite Kim Kardashian). This index compares the number of followers a researcher has on Twitter to the number of citations they have for their peer-reviewed work (Hall, 2014). It is a satirical but apt measure that can highlight when researchers have a social media visibility that exceeds their academic standing and impact, and vice versa. So, given the power and ease of using social media to generate buzz around a piece of research, Hoffman (2021) reminds us that social media shouldn't be a substitute for high-quality research content. He also cautions that social media can be used to increase the impact of mediocre and highly flawed research. In other words, narcissism can make us lose sight of a business academic's mission, which is to do rigorous, good-quality research that helps change how people think and act in ways that improve society.

Academic narcissism includes humblebragging, which is when academics use social media to boast about their work or themselves in a complaining (e.g., "it is so grueling having to give yet another keynote talk") or a humble (e.g., "I am so undeserving of this award") way. Research finds that these forms of humblebragging are less effective (i.e., how much the bragger is liked and perceived to be competent) than straightforward bragging (Sezer et al., 2018). Such academic dissemination is ineffective and even damaging because it is perceived as deceitful. This online engagement risk is also impacted by prejudices, with female humblebraggers being less liked than male humblebraggers (Doty, 2019).

One way to prevent such narcissistic tendencies is to ensure online engagements are less about vain boasting and more about engaging with different audiences to achieve impact goals. Recognize that embodying self-restraint and genuine humility can be virtuous in itself and helps maximize the learning, innovation, and impact goals of an open academic. In other words, be wary of having an overly self-absorbed and uncompromising promoter approach, and try to shape and target engagements to advocate, educate, persuade, and make a difference to your field and society. Go beyond promoting your work and amplify others' evidence-based insights to enact broader relationship building and communication (Bogers, 2021).

4.3. Uninhibited backlashes

The power of social media for academic openness is its capacity to connect scholars and their work to audiences outside the academy. This means that research that gets a good deal of online attention can also attract a lot of scrutiny and critiques. Such attention can often be valuable, but sometimes toxic, involving backlashes via trolling. When academics experience these social-media attacks, it is important to understand their nature and respond effectively. The motivation for trolling is not to stimulate thought-provoking discussions that help advance, shape, and apply knowledge. Rather, trolls sow discord online by engaging in provocative, insincere, and rambling ways that get a reaction from others for the troll's enjoyment (Baccarella et al., 2018). Trolls are amused and energized by the responses to their trolling, and enjoy disrupting or manipulating the framing, investigating, and disseminating activities of social-media-enabled open research. Given these motivations, the escalating response levels to trolling entail ignoring, blocking, and possibly reporting the troll to the social media platform (Lewis et al., 2020).

Backlash can also be more abusive, threatening, and domineering in nature. Be cognizant that specific research topics (e.g., environmental, political, and identity issues) will be more susceptible to abuse, and attacks may stem from the gender, race, or sexual identity of the academic using social media. When experiencing online bullying, the same responses to trolling apply but reporting it to your institution and possibly other authorities is likely advisable. Reporting is recommended as online bullying can negatively impact your well-being and reputation. Guidelines for academics to report bullying include preserving and creating a log of the bullying engagements and content, asking colleagues to do this for you if necessary, and

consulting with academic administrators to assess and mitigate harm that can affect your work and career progress (Penn State, 2020).

4.4. Mission-reward misalignment

While many universities call for academic research to be more open and impactful to better address societal problems, the policies and practices within many universities are not in alignment. For example, in 2011, the university employing one of the authors of this article coined itself "the engaged university" as defined by cutting-edge research shaped by far-reaching community engagement. However, 12 years on, this university's mission and slogan were not accompanied by matching shifts in recruitment, tenure, or promotion policies. While the unchanged policies and associated practices did not dissuade engaged scholarship, they did not encourage, support, and reward this open approach to scholarship, either. This mission-reward misalignment seems to exist at many universities. Scholars work at institutions that pay lip service toward being more open and impactful but do not adequately support and reward such scholarship—and can even penalize it. Conversely, the other author of this article has experienced explicit recognition and reward to some extent from their university for the use of social media for openness in terms of engagement.

In response to this misalignment, initiatives have been established around the world to improve academic research's ability to focus on and solve society's critical problems. Three of these initiatives, Responsible Research for Business and Management (RRBM, 2020), the HIBAR Research Alliance (Austin et al., 2020), and the Declaration on Research Assessment (Saenen et al., 2021), provide recommendations to help close the mission-reward gap. University leaders should ensure that the policies and committees that deal with recruitment, promotion, and tenure, appropriately recognize, support, and reward open and impactful scholarship. They should widely demonstrate this alignment with metrics, success cases, and changes to how researchers are recruited, trained, and promoted. Journals and academic associations should track, assess, and share the impact of the research they support and publish. Business journal editors and academic association leaders should invite and publish research oriented toward critical societal issues. They should also better support ways of open dissemination and be wary of misalignment. The *Academy of Management's Insights*, an online magazine type publication that shares insights for managers and others based on research published in its other journals, exemplifies

misalignment. Instead of having fully open access so anyone can read and learn from the research summaries, as of May 1, 2022, it requires a paid subscription to access most of its online pieces. This lack of open access impedes its online magazine's aim of sharing the academic research findings to practitioners worldwide. To avoid such mission misalignment and help foster more open and impactful research, RRBM, HIBAR, and DORA all declare how important it is for all levels of our profession—individual researchers, schools, universities, journals, and academic associations—to coordinate changes in the criteria, processes, and incentive systems for doing research.

5. Conclusion

Our appeal for business academics to use social media for more openness and impact does not imply that they mindlessly shift to more applied research, or that they sacrifice rigor and neglect their academic fields. Instead, we view social-media-enabled openness as a digital technology approach to go beyond different knowledge boundaries for producing research that is both relevant and rigorous. Such academic openness complements the isolated and focused elements of closed research vital to producing high-quality impactful research. As we see in the research on firms' open innovation, openness is only beneficial up to a certain point (Laursen & Salter, 2006). It requires balance and consideration for how and why to be more open. In other words, academics and their institutions should view approaches to scholarship as a dynamic and ambidextrous capability. They should also strategically manage openness through social media to reap its benefits and overcome its limitations (Bogers et al., 2019).

Our profession's obsession with developing theoretical contributions worthy of publication in A-ranked academic journals is a suggested reason for business school research not producing enough impactful knowledge for practitioners (RRBM, 2020). This preoccupation with publishing in top-ranked journals can be at odds with developing questions, collaborations, and projects that help address pressing business or social issues. We hope the insights and frameworks in this article will not only guide business academics to use social media to address this relevancy crisis, but also encourage openness to discovering and leveraging experience and expertise from practitioners and others. In doing this, we anticipate our profession will be more prepared to produce rigorous and beneficial knowledge that changes how people think, act, and impact the world. Finally, given that this article is based on our

research on organizational openness in the face of innovation—and our own experiences with using social media for academic openness—we are open to hearing from readers about their views on how to use social media to address the research-practice gap.

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