

Article

Societal Impacts of Higher Education Research: From ‘Publish or Perish’ to ‘Publish and Prosper’ in Business School Scholarship

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Abstract: This paper introduces a transformative systems-level framework for understanding the interplay of institutional, cultural, and systemic dynamics influencing the societal impacts of academic research. We introduce and apply the Societal Impacts of Research Institutional Ecosystem (SIRIE) framework to business school scholarship and academic research in higher education. The United Nations Sustainable Development Goals (SDGs) serve as SIRIE’s normative ethical framework to benchmark: institutional mission; accreditation bodies’ compliance requirements; faculty tenure and promotion research expectations; the influence of rankings and ratings; and journal quality metrics. Our framework acknowledges the role the Anthropocene Epoch plays in contributing to contemporary social and environmental problems. We argue that recalcitrant institutional forces in academia neutralize the promise of academic scholarship to galvanize meaningful societal impacts. We assert that the contemporary state of higher education research is unfortunately dominated by a “publish or perish” mentality. This narrative produces academic research that is decontextualized from today’s exigent “grand challenges” related to poverty, climate, equity, health, peace, environment, etc., as well as transformative solutions for a sustainable future. By exploring an alternative paradigm for academic research through SIRIE and the SDGs—“publish and prosper”—we detail how academic research can meaningfully contribute to change the world for the better.

Keywords: Sustainable Development Goals; SDGs; responsible research; research impact; business schools; journal impact factor; Anthropocene; h-index; citations; journal ranking



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1. Societal Impacts of the “Force for Good” Business School Movement

The United Nations Sustainable Development Goals (SDGs) [1] offer an aspirational and practicable framework to reflect on the potential societal impacts of higher education and the academic research it produces. The 17 SDGs contains 169 targets and 231 unique indicators to measure progress against real-world actions that lead to the alleviation of poverty, promotion of equity and justice, improvement of society’s health, reductions to environmental damage, and transformative solutions for a sustainable world. With the signing of this blueprint by UN member states in 2015 came the urgent call and expectation that nation states and all sectors of society would contribute to achieving this ambitious agenda by 2030 [2]. Notably, business schools are identified as major contributors to achieving the SDGs [3], particularly when the scholarly research of faculty, student educational learning outcomes, and student career preparation align toward fulfilling the SDGs.

As a subset of higher education, business academia has been at the vanguard of substantively and impactfully integrating the SDGs into its institutional mission, vision, and core value statements—with demonstrable outcomes [4]. This adoption has been motivated, in part, by myriad business school professional networks (PRME [5], RRBM [6]), rankings agencies (Corporate Knights [7]; QS World Rankings [8]; THE Impact Rankings [9])

and accrediting bodies (AACSB [10]; EFMD [11]) that call directly for the inclusion of the SDGs into business school strategy, research, pedagogy, and institutional practices. Consequently, many business schools have made inspired progress toward becoming “forces for good” [12], leveraging the SDGs as well as other ethical and sustainable frameworks. Notably, while the SDGs represent one pathway toward societal and environmental betterment for business school academia, evidence of serious commitments to sustainability, ethics, responsible leadership, and environmental stewardship outside of the SDGs also exist. We contextualize research impact on the SDGs as they offer what is arguably the most comprehensive, measurable, and cross-culturally embraced framework for sustainable development as applied to higher education (HESI [13], SDSN [14], UN university [15], UNITAR [16], UGC [17], UN Academic Impact [18]).

Despite all these efforts, the ability to more demonstrably advance the positive impacts of business schools—as a microcosm of higher education generally—has been severely constrained by the dysfunctional structures that govern them, as well as the lack of impetus for these structures to change. Business schools operate within a very particular system, replete with formal rules and informal norms that determine both compliance and deviance. Essentially, business school academia is a cultural production [19] that generates foundational guidelines, both explicit and tacit, on how it should be constructed and behave related to positive societal impacts [20]. Unfortunately, these foundational institutional guidelines may run counter to the efforts made by business schools toward maximizing their societal impacts.

Perhaps the most stultifying institutional dynamic in business school academia that prevents full realization of positive sustainable impact on business and society relates to the very purpose of the scholarly research it publishes. *What is the ultimate objective of academic research?* Is it to generate esoteric knowledge removed from today’s “grand challenges” [21] or to contribute practicable insights, strategies, and tools to change the world for the better? While many business schools expound the latter, we *argue that recalcitrant institutional forces in business school academia neutralize [22,23], and perhaps even render retrograde, the promise of academic research to galvanize meaningful societal impacts.*

First, this paper aims to address the fundamental barriers blocking academic research from having explicitly intentional and positive impacts on society. The current state of the business academia ecosystem applied to the SIRIE framework (see below) will be supported and explained using research conducted by several scholars across several disciplines. Next, a transformed state for each element within SIRIE is suggested as a necessary condition to move the research trajectory toward a more socially beneficial outcome. Finally, we recommend additional research to move forward this transformative agenda.

2. Societal Impacts of Research Institutional Ecosystem (SIRIE)

Diagnosing the embedded institutional constructs that guide academic research is the first step to liberating—and ultimately transforming—restraints on a research agenda focused on societal impacts. To assist in this unpacking, we created the Societal Impacts of Research Institutional Ecosystem (SIRIE, see Figure 1). SIRIE is a dynamic systems-level framework for understanding the interplay of internal and external elements influencing the societal impacts of research for any academic discipline or higher education institution (HEI).

Key to the SIRIE framework is the tripartite dynamic interplay of the three circles. The outermost circle provides the real-world contextualization of humanity living on planet Earth and the challenges faced by deleterious effects of the Anthropocene Epoch [24]. The middle circle identifies the key institutional elements involved in the systemic and cultural generation of academic research: institutional mission; accreditation compliance; rankings’ influence; journal quality metrics; and faculty research expectations. These elements in concert determine the center core of the framework which represents the intended outcomes of positive research impact conducted within SIRIE. In the multicolored circle, we offer the SDGs, as a holistically sustainable set of goals, metrics, and action plans to help eliminate

the damaging effects of the current Anthropocene. Arguably, the most challenging aspect of SIRIE that blocks these intended outcomes is the strong association between the outermost and middle circles. Specifically, the Anthropocene's major influence on the institutional elements guiding academic research that continues to reinforce the ideologies responsible for creating the world's "wicked problems" [25,26].



Figure 1. Societal Impacts of Research Institutional Ecosystem (SIRIE).

First, we utilize the SIRIE framework to detail each of these elements and their relational interconnectedness as it pertains to business scholarship. Next, we provide critical assessments of SIRIE's contemporary arrangement, including research we have conducted to date. Finally, we offer transformative recommendations and future directions needed in these domains to transform SIRIE for positive societal impacts.

2.1. The "Grand Challenges" Posed by the Anthropocene Epoch

The outer most circle of Figure 1, identifies the contemporary "grand challenges" [25], "wicked problems" [26] and "the planetary boundaries" [27] that exist at this specific point in human history and geological evolution, known as the Anthropocene Epoch (the Anthropocene Epoch is an unofficial unit of geologic time, used to describe the most recent period in Earth's history when human activity started to have a significant impact on its social order and the Earth's ecosystems) [28]. In this era, human needs are at the center of the universe inspiring economic systems [29] focused on *hyper-efficient* wealth accumulation absent of *just* wealth distribution. The Anthropocene is a seemingly ineluctable phenomenon that creates injurious human inequalities and irreversible depletions of natural resources the world over. Humanity's population growth and consumption patterns have challenged Earth's carrying capacity [30] at an alarming rate, signaling the real possibility that assaulted nature-human ecosystems will ultimately render our biosphere inhospitable to life as we know it. The Anthropocene is teeming with fundamentally flawed and broken systems.

2.2. The Cultural and Systemic Influences on Business Scholarship

The middle circle of SIRIE identifies the key elements involved in the systemic and cultural generation of academic research that rest upon the unstable and unsustainable

Anthropocene. Reinforced by economics and business scholars who, in the majority of cases, continue to inform the key elements influencing business scholarship toward the status quo of free-market capitalism epitomized by Friedman's contention that "the social responsibility of business is to increase its profits" [31] (a purely shareholder primacy view of the firm in a capitalist economy has been successfully supplanted with a more societally beneficial conception of the "stakeholder theory" of the firm [32]). Institutional mission, accreditation bodies' compliance requirements, faculty tenure and promotion research expectations, and the influence of rankings and journal quality measurements, in concert, determine business academia's research trajectory toward societal impact or not. Each element is discussed below.

2.2.1. Institutional Mission

As professional schools within universities and sometimes freestanding, business schools are typically chartered to contribute to advancing the contemporary practice of business primarily through research and education, grounded in the context of free-market capitalism, neo-classical assumptions, and shareholder primacy [33]. Of course, every business school will acknowledge its obligations to promote positive social and environmental goals—a "Third Mission" [34]. Yet, in the mainstay, business schools are traditionally upholders of what might be labeled a very conventional purpose of 'business as usual' focused on maximizing economic growth, profit, and shareholder wealth [33]. Given this point of view, business school research is considered impactful when it advances the aims of capitalism and capitalists, with no explicit intent or guarantee of positive societal impacts [35].

2.2.2. Accreditation Compliance

Business school accreditation bodies such as AACSB [10] and EFMD [11] hold tremendous sway over how business schools construe their societal impacts of research. In business academia, these two dominant accreditation bodies articulate guidelines on how to evaluate the quality of scholarship and quality of scholars who produce it. Traditionally, accreditation standards compel academic researchers to publish in "high-quality peer reviewed journals" [36], usually commensurate with the types of quantitatively focused parameters outlined for journal quality measurement (see Section 2.2.4 below). As such, traditional accreditation standards determine a comprehensive formation of business school identity and behavior that reinforces the status quo of a holistically unsustainable brand of capitalism [37].

2.2.3. Rankings' Influence

Two different but intertwined types of rankings command the attention of business schools. First, there are commercially produced rankings that rank business school quality based on a set of criteria using various standards and methodologies (FT MBA [38], QS World Rankings [8], THE Impact Rankings [9]). Criteria could include data about funding, faculty, student admissions, student employment placement and salaries post-graduation, class sizes, and research productivity. Second, this research productivity metric often evaluates schools based on *number of publications* within select business journals. More granularly, there are rankings that specifically evaluate schools on research productivity, ranking schools according to where faculty publish, privileging 'top' business journals. Business schools are motivated by both types of ranks to elevate prestige and improve their financial positions, allowing for higher tuition fees, recruitment of more qualified faculty, increased enrollments, and attracting additional research dollars [39,40]. It should not be surprising that business school deans pay riveted attention to business school rankings, copycatting what they can and innovating what is necessary to stay competitive. As such, these rankings use quantitative metrics as a surrogate for impact, defining and constraining the priorities of business school scholarship to maintain alignment with the 'business as usual' reinforcement of unsustainable capitalism in the Anthropocene [39].

2.2.4. Journal Quality Metrics

Multiple considerations for assessing the quality of academic journals exist: journal quality listings (i.e., Cabells Scholarly Analytics [41]), journal editorial board and publisher reputations, support by professional societies, journal ranking organizations, peer or editorial review, and acceptance rates. Yet, the principal determinant of journal quality is a quantitative bibliometric of journal article citations commonly known as a journal impact factor [42], engendering a “more is better productivity syndrome” [43]. Essentially, journal quality measurements are based on publication productivity and attendant metrics, not impacts or outcomes related to solving real-world problems. For example, the number of times articles in a journal are cited in other journals—regardless of the content, rigor, or relevance of both source and destination—functions as a seemingly unassailable and misleading proxy for quality: “citation intensity” vs. “impact intensity” [44,45].

2.2.5. Faculty Research Expectations

Like the journal impact factor [42] for journals, the h-index is a quantitative “estimate of the importance, significance, and broad impact” [46] of a scholar’s research contributions via academic journal publications. Combined, the journal impact factor and h-index undergird expectations for what makes quality scholarship and a quality scholar, respectively. Faculty pursuing tenure and promotion are fundamentally incentivized to publish in highly cited academic journals to increase their “broad impact” [47] in the field. The h-index serves only as a hollow proxy, yet is understood by many faculty as a ‘true’ measure of disciplinary contributions. The institutionalization of business journal impact ratings as the measure of research quality and impact incentivizes faculty to align research priorities within a select publication list. As evidence, several institutions have incorporated publications in FT50 journals in tenure and promotion (T&P) requirements, see [48–54]. If the selected set of business journals favors topics disconnected from evolving societal and ecological imperatives, then it is doubtful faculty will focus their research on seemingly ‘unpublishable’ research striving for impact [35]. Worse, publishing outside these norms can have deleterious consequences for career acquisition, maintenance, and advancement [35].

2.3. The Societal Impacts of Research

In SIRIE, the center circle represents the intended societal impacts of the research conducted by the discipline. It is a difficult task to measure research impacts on society. Traditional metrics rely on a simplified proxy that measures conventional standards of academic quality and quantity of *outputs*, rather than *outcomes or impacts*. The use of SDGs as a framework to measure the impact of academic research has been identified by scholars across several disciplines [55–62]. These studies have attempted to map scholarly articles against the SDG framework with diverse results. Although not a perfect tool, we suggest the SDGs at the innermost circle of SIRIE serve as a normative ethical framework to benchmark whether business scholarship intentionally or unintentionally has positive or negative impacts on society.

3. The Desperate Call for Disruption and Transformation of SIRIE

Despite encouraging signs of transformation by the business academic community (i.e., the annual conference theme for the 2023 European Academy of Management was “Transforming Business for Good”—a welcome signal that a major business academic professional society is focused on societal impacts [63]) to foster more impactful research, there continues an entrenched ‘business as usual’ [47] mentality. Key stakeholders in SIRIE are largely unaware of the role they must play and mostly unaware of the insidious dysfunctions embedded in the Anthropocene that have derailed business as a “force for good” [29]. Unfortunately, our observations over a combined 40 years in business school academia suggest the majority of business school administrators and faculty are *not* shocked or motivated by the exigency of this much-needed major transformation.

Table 1 provides an overview of the current incarnation of the key elements of SIRIE and the recommended transformations needed to disrupt it. In the first column of Table 1, “publish or perish” [64] epitomizes the basic orientation of academic research where publishing is the lifeblood of individual faculty livelihoods and the foundation of knowledge produced by higher education. In the second column, “publish and prosper” liberates publishing as a source of diverse and innovative faculty expression, serving the real needs of people and planet to sustainably thrive in the Anthropocene [65].

Table 1. Publish or Perish vs. Publish and Prosper.

	<i>Publish or Perish</i> Misalignment of SIRIE Elements, Generating Research Fostering Unsustainable Outcomes for the World	<i>Publish and Prosper</i> Alignment of SIRIE Elements, Generating Impactful Research to Make the World Sustainable
Institutional mission	Business schools support ‘business as usual’ through research and teaching that reinforces the economic status quo of profit-seeking, wealth maximization, efficiency, and neoliberal capitalism, disproportionately benefitting shareholders and owners.	Business schools challenge their conventional institutional purpose by strategically integrating sustainability, ethics, and responsible management into mission statements and operations, benefiting all stakeholders, including the Earth.
Accreditation compliance	Accreditation is designed to encourage the optimization and dominance of business in a capitalist society, preparing managers to perpetuate traditional capitalism where equitable impact on person and planet is of faint or no concern.	By offering new ‘impact’ criteria for research and teaching, novel accreditation standards demand that business schools demonstrate a positive contribution to sustainable development.
Rankings influence	Rankings are quantitative metrics, disembodied from meaningful standards of impact, gamed by business schools to constantly increase reputational value of their faculty and institutions.	Alternative rankings metrics and bibliometrics for both business schools and research journals highlight innovative scholarship that addresses “grand challenges” for humanity and the Earth.
Journal quality measurement	Fixated on counting citations and author productivity, devoid of any normative value assignments to these measures, academic publishing in business schools is reduced to a ‘numbers game’.	Conventional journal metrics are augmented with standards requiring relevant treatment of tangible effects on pressing social and environmental issues, elevated to an ‘impact game’.
Faculty research expectations	Faculty desire to publish in highly regarded journals not necessarily aligned with societal impact. Formal policies and informal norms of tenure and promotion dictate limited outlets for publishing impact focused work.	An embracing of impact in existing journals, and a proliferation of new impact focused journals, empowers faculty to pursue impact research without derailing their careers with adverse tenure and promotion decisions.
The Anthropocene Epoch	Severe limitations of scope breed insular, ivory tower type research dissociated from business and business schools’ contributions to the deleterious effects in the Anthropocene. Business school research is effectively conducted without context or accountability.	Impact focused research inspires adoption in pedagogy, practice, and policy. Breaking free of the ‘business as usual’ mentality, research sparks a radical transformation of the Anthropocene with new business models and practices for a sustainable world.

Prospering requires that incentives faced by business school institutions and faculty work in concert to harness self-interest in service of the Common Good. Currently, the formal and non-formal incentives that influence business school scholarship run counter to sustainable development, moving the trajectory away from the intended target of generating research with societal impacts (see Figure 2).

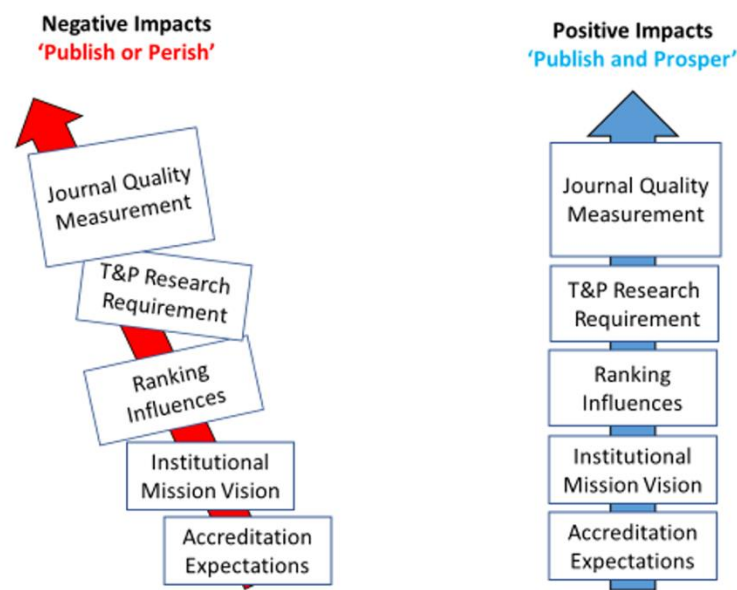


Figure 2. Aligning SIRIE Elements for Positive Societal Impacts of Research.

4. Discussion

Although the paradigm shift to publish and prosper is already percolating [65,66], it does not yet have critical mass to engender the tipping point of wide-scale system change. To start, business schools and faculty must recognize the critical role they play in a much larger ecosystem. Business schools exert tremendous influence on society through knowledge they generate and the actions of their graduated students. Additionally, business schools and their various stakeholders must be made aware and take responsibility for the role they play in constructing and maintaining the Anthropocene. Unbridled economic growth, as it is currently conceived and implemented, is not capable of environmental sustainability [29,30]. Research is needed to find a new way to achieve a sustainable world through the power of business. The SIRIE framework, introduced here, offers a systematic approach for understanding and describing the key elements of the business academia ecosystem. It provides a holistic view of the interdependencies and relationships between the different elements that influence the trajectory of research impact. Most importantly, it highlights the desperate need for transparent and well-aligned incentives across all the elements in SIRIE to motivate research targeted toward positive societal impacts.

Below we highlight three key elements of SIRIE that have had an insidious negative influence on business academia's ability to provide more research with explicit links to a "Third Mission" of HEIs [34]. These include the measurement criteria used to determine the quality of faculty research, journal quality measures, and the impact of institutional rankings. By shedding light on flaws inherent in the system we hope to encourage hallmark business schools (business schools that rank top in academic journal publications and global school rankings and are considered aspirational exemplars for others such as Columbia, Harvard, Stanford, INSEAD, University of Pennsylvania, etc.) to act toward correcting and aligning the key elements of SIRIE (see Figure 2). The recent Law School boycott by the top law schools in the US to not participate in rankings sends a strong signal that some HEIs are beginning to recognize the perverse effects that rankings can have on institutional priorities [67]. This deemphasis by top HEIs on rankings would allow for lower-ranked schools to follow suit, establishing what is arguably the ultimate aim of academic research—to support sustainable development.

4.1. Criteria Used to Determine the Quality of Faculty Research

Many factors contribute to the dysfunctions of the "publish or perish" phenomenon [68,69]) and failing promise of "publish and prosper" in SIRIE. The dominant

quantitative publication performance measures used as indicators of research *quality* are perhaps the most pernicious factors, creating a “tyranny . . . obsessed with quantity” [70] (p. 202) rather than *impact*. Regardless of well-intentioned mission statements and accreditation expectations calling for research to be aligned with advancing the SDGs or other sustainable development standards, the institutionalized research metrics used to determine career advancement and job security for faculty have seriously undermined research impact. Each discipline is ruled by a small set of ‘top’ journals that define a field, usually linked to ‘top’ schools whose editorial boards control them as “gatekeepers” to disciplinary fields [71]. Faculty are incentivized to publish often and target these journals with high impact factors in hopes of garnering high citation scores. As such, faculty are more concerned with research output volume and specific journal placements, rather than with the real-world impact of the research itself or whether it has any positive influence on society [72].

As publishing is paramount, failure to publish can eliminate (“perish”) faculty careers. Peer review in higher education is designed to motivate academics to produce highly rigorous and relevant [73] research through a competitive process involving blind review by experts. However, in the mad dash for publications, scholars pragmatically align their research with the ideologies and preferences of editorial boards and reviewers of the targeted journals. This includes citing findings from articles published in these same journals [74,75], creating an insular, self-referencing system unable to incorporate impact related themes. As such, traditional research topics continue to be deeply entrenched, stifling research innovation for impact.

Examples of this stifling abound. Exposing injurious gender bias and an alarming lack of treatments involving the SDGs, a recent study [35] investigated the research contained in the list of 50 journals endorsed by the Financial Times (i.e., the FT50 [38]). Despite the lack of transparency on the methods used to select journals on the list and its static nature, the FT50 list has become institutionalized as a primary measure of research quality and prestige by business schools and faculty. As such, an attempt was made to better understand how this closed publication system embedded with systematic biases [76], pushed focus away from societal imperatives, in particular the SDGs. The findings showed evidence of selectivity, confirmation, and anchoring biases influencing research agendas. In particular, the published articles were over-represented by observed white male primary authors and North American (NA) data sets and institutions [35]. The study further highlighted that the probability of an SDG-related article increased with observed female primary authors and non-NA data sets from non-NA institutions. Unjustly, embedded gender bias within top ranked journals has made publications for females even more challenging [77]. Additionally, the Global South is woefully absent reasonable representation within top ranked journals [78–80]. Additionally, of the 5000 articles analyzed in the FT50, 73% are identified as having no alignment (neither explicit nor implicit) with the SDGs. Moreover, 96% of the FT50 journals rated in the bottom half amongst a set of 50 journals substantively focused on the SDGs—*top* journals at the *bottom* of the impact ratings [44,45] does not bode well for transformative research impact derived from business school scholarship.

Since publishing opportunities in peer reviewed journals, particularly ones rated or ranked highly, are extremely limited [81], ‘desperate for tenure’ academics will find other venues to publish their research. A metastasizing growth of journals has emerged to ostensibly help vulnerable scholars publish. Indeed, more journals provide more possibilities for faculty to publish and not to perish. Yet, an increase in journals yields a morass of journals of varying degrees of quality, with a diffusion of knowledge that becomes increasingly difficult to synthesize. Consequently, a lowering of standards takes foot; a published paper of mediocre or even low quality is still more valuable than an unpublished one of merit. Additionally, publishing in predatory journals [82] has unfortunately become an option to bulk up CVs; sometimes predatory journal standing is unbeknownst to the authors, sometimes known. This dysfunctional reward system produces a great deal of meaningless research serving as an instrumental means-to-an-end performative exercise

for academics—not the kind of research impact essential to understanding and solving real-world exigencies [83,84].

4.2. Journal Quality Measurements

Another external element of SIRIE to be revolutionized is journal quality measurements. While journal quality measurement is admittedly a smaller cog in the machinery of SIRIE, it is perhaps the most immutable and ultimately influential. In a competitive ‘manage-what-you-measure’ academic system fixated on high faculty productivity and citation counting, the assessment philosophy underpinning journal metrics is inherently bereft of impact considerations. As academic journal publications comprise an outsized influence on the overall quality perception of an HEI, they are actually a tremendous lever for change. Journal metrics supply data used to support accreditation, faculty tenure and promotion decisions, rankings, and can undergird the major academic component of a HEI’s mission—its cultivation of research for knowledge, pedagogy, and practice.

Alternatives estimations of journal quality that capture societal impacts are on the rise, offering a vital aspect to uprooting the traditional paradigm of an expressly quantitative approach to journal and journal article quality. For example, SDG impact Intensity (SDGII) is a new journal metric that uses AI to determine a journal’s positive contributions to advancing the SDGs [44,45]. Building on SDGII, researchers have incorporated advanced Generative AI techniques to normatively adjudicate honor roll and award-winning articles of the Responsible Research in Business and Management (RRBM) initiative [85]. Qualitatively, ChatSDG [85] natural language AI outputs detail to what extent an article or journal is (or is not) having a direct connection to achieving the SDGs. Most all major publishers and academic data providers now include some mapping of their research content (journals, journal articles, books, book chapters, etc.) to extant standards of societal impacts, most notably through the SDGs (e.g., Elsevier, Springer, Digital-Science’s Dimensions, United Nations SDG Publishers Compact [86]). This SDG mapping could easily be used by business academia to identify and encourage impact focused scholarship.

4.3. Impact of Institutional Rankings

Business schools are evaluated by two primary methods. The first is by accreditation agencies (ex: AACSB, EFMD) and the second is by media ranking publications (the Financial Times, the Economist, etc.). These methods are distinct. Accreditation agencies evaluate how well an institution provides business education. Ranking bodies benchmark business schools against each other on various criteria. Pitt-Watson and Quigley [40] note that criteria used to rank business schools are not aligned with the needs of society. Business schools are motivated to gain high ranks. Priorities of business schools “appear to be greatly influenced by business school rankings” [40] (p. 2). Business schools focus and act on priorities that favorably bolster reputations, increase student enrollments, and drive financial gains. They further highlight that traditional business school rankings create adverse effects due to the metrics used, including [40] (p. 2) “(a) salary overemphasis; (b) business schools penalized in the rankings for turning out graduates who work for non-profits; (c) course content not evaluated; and (d) teaching quality, sustainability and business ethics minimized or absent”.

Of importance to this paper is the inclusion of the research quality metrics described above (Sections 4.1 and 4.2) as one of the criteria to determine a school’s rank. This serves to concretize a system of evaluation that is less obvious, but nevertheless effective in continuing to motivate the “publish or perish” mentality. In previous studies, perverse effects of chasing rankings on institutional priorities have been documented [87]. Because of their inordinate influence, schools are encouraged to subscribe to rankings that align with both their teaching and research priorities. Rodenburg et al. [87] analyze a new rating system that aligns with SDG priorities for business schools’ consideration. For a more in-depth exploration of SDGs in business schools see [88–95].

Policy interventions involving impact focused research at the institutional level in support of changing the counterbalancing incentives described above have been lacking [96,97]. However, rethinking, characterizing, and promoting academic research as a leverage point for societal impacts is not difficult to envision with the SIRIE framework. It is up to vanguard leadership in the HEI space to steward the type of higher education institutional milieu where academic research can contribute to reversing the current troubles of the Anthropocene. Academic research can realistically support humanity and the Earth to sustainably flourish—*publish and prosper*.

5. Conclusions, Limitations, and Future Directions

Our research focuses on building awareness of business academia's contribution to an unsustainable future caused by the Anthropocene. We offer pathways to repair these damages through fostering research dedicated to societal impacts. We provide an in-depth analysis of business academia as a generalizable case study to all academic disciplines and HEIs. We investigate the interplay of the cultural and systemic elements that influence research, highlighting faculty research performance and journal quality metrics, as well as media rankings, as key impediments to moving forward. There is a dire need for higher education incentives to be well aligned across the elements in SIRIE. To evoke this much-needed change, metrics that measure the societal impacts of research must be created, embraced, and enculturated in academia.

We identify the SDGs as a normative foundation to evaluate research and provide examples of variegated ways they are being implemented. We acknowledge there are limitations with the SDGs as a research assessment tool [98]. Critics suggest the SDGs are inconsistent, difficult to quantify, implement, and monitor [99]. Additionally, the SDGs include several broad themes and have interrelated targets [100]. There are several versions of the SDGs. Mapping research against the SDGs could vary based on the version applied. The SDGs have been translated into many different languages where the meanings have the potential to change. Despite these challenges, the SDGs are a remarkable feat of humanity's collaboration that is endorsed globally and scheduled to be achieved by 2030. *In our estimation, the SDGs are the best bedrock on which to build a new paradigm of positive research impact for sustainable development*. Furthermore, benchmarking progress on human and environmental change to the Anthropocene vis à vis the SDGs is well established [101]. Previous research suggests a common interpretation of the SDG framework would be most beneficial when used as a research measurement tool [98].

An important aspect of our paper that warrants further examination concerns finding ways to test the validity of the theoretical SIRIE framework. This will require a systematic evaluation of its performance, its predictive power, and its ability to capture key dynamics and patterns of the ecosystem. To this end, an extensive scoping review of research impact and responsible research is underway by the authors. Our intent is to determine the gaps in responsible research assessment and better understand the levers of change to close them. Additionally, this study will assist in the determination of criteria against which the validity of the SIRIE framework can be tested. This may include factors such as accuracy, explanatory power, consistency with empirical data, as well as the ability to make accurate predictions about systemic change in higher education.

In the meantime, there are evaluative criteria that might be useful as a vehicle to assess SIRIE's impact. The simplest means to ensure some positive effect of academic institutions and research on the SDGs is to integrate them into every facet of SIRIE and hold academia accountable to: institutional missions; accreditation; rankings and ratings; journal metrics [44]; and faculty research expectations for performance management. Moreover, since the SDGs are mutually interdependent [98], they will only be advanced by an academic silo-busting explosion of diverse research across geographies, disciplines, genders, institutions, and economies. With SDGs as a new cultural milieu and lingua franca for academia, a common set of academia-specific standards, metrics, and practices can emerge,

galvanizing global academia as a “force for good.” Promisingly, substantive integration of SDGs by universities is already being put into action and reported [57,102–104].

However, at present, there is a continued focus on research topics in business journals that favor the status quo with several of the topics in contradiction with the values and goals of sustainable development [21,35]. Currently, we present the SIRIE framework as a public awareness tool and action plan for academia. SIRIE highlights the systematic elements undermining the ability of research to provide innovative eco-human solutions that demonstrably make progress on reversing the cataclysmic trends of the “grand challenges” we face today. The framework also serves to highlight the role business academia has played in creating these challenges in the first place. Bai et al.’s [105] (p. 352) call for a new research agenda for a sustainable world by transforming human-environmental relations in the Anthropocene’ accurately encapsulates the intention of SIRIE:

“We argue that sustainability debates should focus less on the continuity of present pathways and be more inclusive of new visions and opportunities offered by desirable and plausible futures, opening up a wider range of ‘outside-the-box’ possibilities as well as new ways to achieve them.”

We trust this paper provides thought-provoking possibilities to transform academic research into an influential and effective catalyst for the sustainable development of humanity and the Earth.

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