Executive Summary

This working paper introduces and elaborates on the Accelerated Research Methodology (ARM), a transformative approach designed to enhance synergy between academia, business, and other stakeholders. The paper provides insights into the structure of ARM, discussing how it streamlines the conventional research process through the application of 'productisation' principles — a set of principles useful for enhancing efficiency, scalability, and clarity in value proposition. The paper also highlights key areas where strategic interventions are imperative to bring about revolutionary enhancements in research practices.

The key insights derived from this approach can be summarised as follows:

- Emphasising Simplicity and Repeatability: The argument is made for prioritising simplicity and repeatability in conducting impactful research, advocating for a streamlined and efficient methodology.
- Significance of AI as a Catalyst: A fundamental aspect of the Accelerated Research Methodology involves the incorporation of Artificial Intelligence (AI), paving the way for seamless integration between academic and business knowledge towards reducing research production time, optimising efficiency and resource utilisation.
- Tangible Processes Driving Opportunities: The approach is anchored in tangible processes, aiming to bridge the gap between academic research and the dynamic needs of entrepreneurial ecosystems, thereby creating new avenues for collaboration and growth.
- Accelerating Contributions to Business Growth: The overarching goal of ARM is to expedite immediate and impactful contributions to Scottish business growth and innovation, aligning research with practical outcomes.

Background Statement

Entrepreneurial Ecosystems are of interest to both policymakers and academics (CITE). The role that research plays in the development of these ecosystems is currently unclear. Despite numerous reviews of the literature and suggested research agendas (Alvedalen & Boschma, 2017; Cavallo et al., 2018; Scaringella and Radziwon, 2018; Wurth *et al*., 2022) there remains ambiguity about whether research is driving policy or vice-versa (Autio et al., 2018; Stam and Spigel, 2018). Arguably worse, there is a strong and continuing school of thought challenging the value of research emerging from business schools for businesses themselves (Parker, 2018).

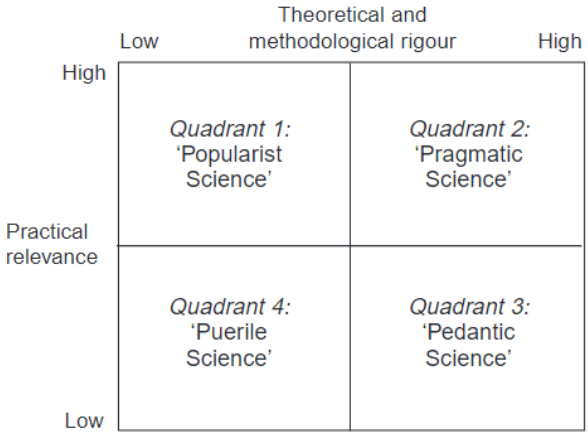
Put it succinctly: ‘Who in their right mind would go to an academic for advice on how to run a business?’; there is little evidence that this has changed since (CITE). Another important question is about how well academics are positioned to provide a contribution to business practice. For example, recent research sought to examine how ideas on translation can help academics reach from the ‘theoretician’s “high ground” of well-defined problems that lend

themselves to technical solutions to the practitioner's "swampy lowland" of confusing problems' (Muñoz and Dimov, 2023). As a matter of fact, there seems to be an inherent assumption that academics can add value. On our part, we don't think this should be taken for granted.

In principle, it is inherent to suggest that academics have acknowledged these shortcomings through calls that research should be both relevant and rigorous (Markusen, 2003; Omeihe, 2023). This is a point to be emphasised that the relevance gap continues to generate debate (Rynes et al., 2001; Van de Ven, 2007; Tkachenko et al., 2016; Wood et al. 2022), with arguments suggesting that gap is fundamentally unbridgeable (Keiser & Leiner, 2009), yet with scope for more optimism (Hodgkinson & Rosseau, 2009).

The recognition calls into question our conventional assumption. We recognise the contributions of Hodgkinson et al., 2001 (See Figure 1) and our position is that it is perfectly feasible for enterprise research to be a pragmatic science-starting with practical relevance and having clear systems in place to ensure that the resulting relevance has both theoretical and methodological rigour.

Figure 1: A four-fold typology of research



Adapted from Hodgkinson et al., (2001)

At the same time, there are two aspects that need to be considered in relation to practical relevance. The first is to make sure that research is problem-led rather than theory-led (Eden and Huxham, 1996; Gibbons *et al*., 2000; Beech *et al*., 2010). Creating impact through research is, or should be, 'a process of co-development' (Macintosh *et al*., 2021), and it is self-evident that 'dissemination is too late if the wrong questions have been asked' (Pettigrew, 2001). The second aspect is to ensure that results from research reach those who can benefit from it quickly. On our part, we recognise that adding speed to academic rigour and relevance has been considered in several contexts including the idea of a research world café' (see Schiele *et al*., 2022).

Whilst we don't subscribe to the view that academic research is inherently too slow to be relevant, we do think that the idea of speed (or perhaps more accurately timeliness) is critical if the relevance-rigour gap is to be bridged. Given that this problem for research has been widely recognised for some time (Hernandez and Haack, 2023), it is interesting to consider why it persists. When considering the impact of institutional leadership on the timeliness of research, it appears that delays are unlikely to result from a lack of urgency instigated by university management. Even more so, there is compelling evidence indicating that such pressure within the research culture can adversely affect the well-being of researchers (Nicholls *et al*., 2023).

Now, onto this scene lands the rigour-relevance gap. Why is there so much interest in this area? Among the suggested factors, certain primary reasons have emerged as central to this growing interest.

First and foremost, we are confronted with the prevailing undercurrent of inertia in academic environments-which can be resistant to change and slow to adopt new paradigms or approaches. Researchers are used to a certain way of working and may be reluctant to embrace new methodologies or engage in collaborative efforts with practitioners, seeing these changes as a shift from their core academic ethos (Kallio *et al*., 2016). Secondly, the traditional academic reward and promotion system prioritises publication in prestigious journals over practical impact (Rodenburg et al., 2021) and/or prioritises teaching over research (Morgan & Finkelstein, 2017). Even more intriguing is the fact that cultural differences between academia and business are complex (Perkmann *et al*., 2021) – for instance, it has been suggested that an approach is to suspend cultural rules or differences, rather than solve them (Beech *et al*., 2022).

As it turns out, difficulties in assessing where to focus research to have impact features here. Similar to Muñoz & Dimov (2023), the most trite question is: 'How can our work change or benefit the economy, society, culture, public policy or services, health, the environment, or quality of life?'. Another reason speaks to the desire to address 'grand challenges' (Seelos *et al*., 2022), which doesn't necessarily seem to lend itself to increasing the speed of research.

It is clear that addressing these challenges merely by urging faster research or greater engagement does not seem likely to be successful. A more interesting approach is taking ideas and processes from outside typical business school research processes, for example using 'translational science' from biomedical research (Muñoz & Dimov, 2023). This has been characterised as the Entrepreneurship Rapid Response Research Initiative (ER3) (Muñoz, 2021), and our proposed Accelerated Research Methodology has the potential to align with this initiative – the overall aim is very similar, even if the approach we are proposing is different.

Productisation and new technologies

We are not naive to ignore that rapid research needs 'pragmatic choices' (Deom *et al*., 2023), and we think that an interesting way to introduce a more pragmatic approach to research is adopting ideas from the literature around productisation, alongside joining the bigger conversation about the potential impact that new technologies (in particular AI) can have on the research process. Productisation (also referred to as 'commodification') involves the transformation of a service or concept into a product and is best summarised as specifying and standardising processes and methods (Jaakkola, 2011; Jarvi and Toivonen, 2020). Whilst it remains an understudied idea it is increasingly gaining traction in service businesses, particularly Knowledge-Intensive Service Businesses (KIBS) (Harkonen *et al*., 2015; Järvi, 2016; Leoni, 2015; Lahy *et al*., 2018).

A notable feature is that the term has been used to describe various business concepts such as product development, software-as-a-product, and technology productization. Yet, it increasingly appears to predominantly refer to service productisation - specifically the development of systemic, scalable and replicable service offerings (Chattopadhyay, 2012). This seems to offer an interesting avenue for increasing the speed of research by identifying elements of a typical research project that could be standardised.

We contend that it is entirely possible that creating clear, replicable systems for research at scale then facilitates increased use of technology to increase the speed of these processes. As a matter of fact, it has been widely acknowledged that generative AI tools such as ChatGPT have the potential to disrupt the academic norm (Royal Society 2018; 2019; Imran and Almusharraf, 2023). This presents both opportunities and challenges in the research process around article design (Cabanac and Labbé, 2021; Dwivedi *et al*., 2021; 2023; UKRI, 2021; Livberber, 2023).

In the broader context, it is important to recognise that discussions and controversy about AI models as 'authors' of academic papers are currently in progress (da Silva, 2023; Polonsky & Rotman, 2023; Yeo-Teh and Tang, 2023)- and there appear to be a paucity of study related to this unexplored aspect. This is what we want to consider and address as part of our proposed methodology. The key here might be how we use and consider the statement that a particular research is 'original' (Thorp, 2023)-as well as looking for a consensus emerging around ethical guidelines for the use of AI (Currie, 2023). Our guiding principle which is consistent with that put forward by Chubb and colleagues (see Chubb *et al*., 2021) is that AI (or any other technology, for that matter) should assist and not replace human creativity.

More interesting is the fact that, when looking at technology as a whole rather than just AI or machine learning, viewing it through the lens of productization changes the nature of this conversation slightly. This is primarily because AI systems are developing rapidly, with new tools that possess the potential to advance research. We believe that the approach to

this is to remember that these technologies are merely tools that a researcher can employ. By structuring research as a scalable, repeatable system, the exact tool becomes less important and can be continually refined and updated.

Key Underpinnings

When it comes to the nature of what we would like to achieve with our proposed accelerated approach and how it can make an impact, we have categorised the broader objectives into two categories: Exploration and Framework Development and Engagement and Testing. These two categories serve different purposes and have distinct characteristics that contribute to the overall functionality of the Accelerated Research Methodology (see Figure 1).

1. *Exploration and Framework Development*

Now we know that applying the accelerated research methodology is a transformative approach designed to enhance synergy between academia, business, and other stakeholders.

But the question is how this can be actualised.

The actualisation of this methodology requires a thoughtful implementation plan, including a meticulous exploration of factors contributing to the persistent relevance gap in management research. This serves as the foundational pillar of our accelerated approach, aiming to understand the issues that perpetuate the gap. We believe that this understanding lays the groundwork for targeted interventions, setting the stage for meaningful change.

In this phase, the ARM will involve a transformative process, which we refer to as 'productised' research process. This innovative approach is designed to expedite the research timeline without compromising the robustness of the research findings. At this critical juncture, it's important to highlight that the goal is to capture and apply the key interplay between theory and practical application. This provides the impetus to bridge the gap between theoretical understanding and actionable methodologies.

On its own, the ARM can be used to extend its reach and accelerate innovation across regional development by working closely with stakeholders in enterprise ecosystems.

However, we understand that effectively improving the relevance gap implies the need to address the issues faced across businesses. More importantly, this requires a focus on developing tailored research practices. We acknowledge that this won't be an easy task. Instead, we must emphasise that the goal is to ensure the exploration and development of the much-needed framework to ensure that the methodologies are directly beneficial to businesses.

It is encouraging to note that, given the iterative nature of research, this phase is driven by a desire to explore deeper into the factors contributing to the relevance gap. In other words, the aim is to identify subtle nuances that may have eluded initial scrutiny, thereby enriching the reliability and validity of the given study.

2. *Engagement and Testing*

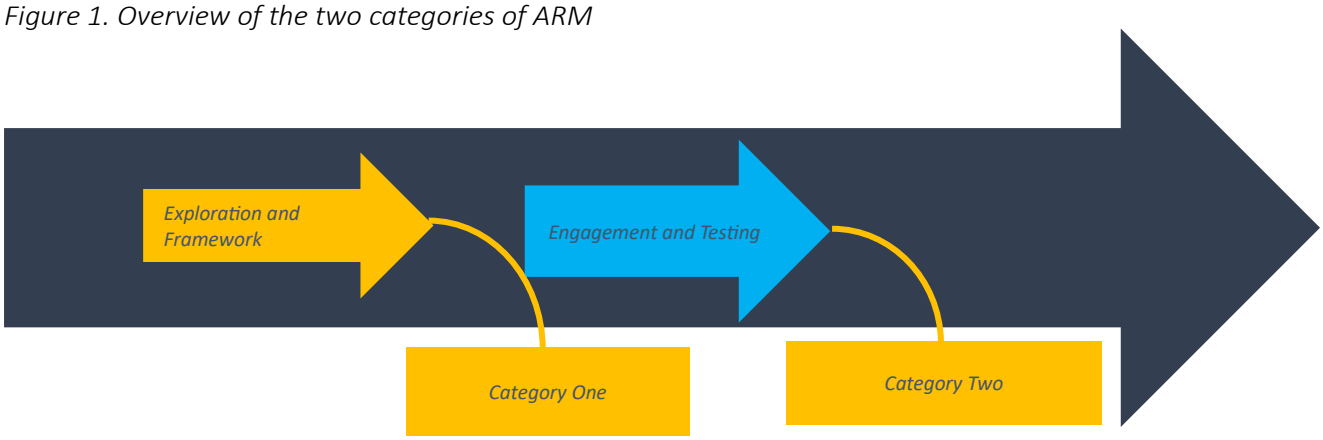
Continuing with the above theme, one essential way to achieve an accelerated research methodology is through the engagement and testing process. Following the preceding phases, where a solid foundation is established, the engagement and testing aspect actively engages with the real-world challenges faced by businesses. The goal is to ensure that the approach provides benefits to the stakeholders. This is of paramount importance.

This helps to explain the testing phase.

The focus is on identifying 'live' problems that enterprises are actively grappling with. These real-world challenges become the litmus test for our proposed methodology, ensuring that research is not conducted in isolation but is deeply rooted in the pressing concerns of the business community. This critical step ensures that the methodology is not a theoretical abstraction but a well-accepted and embraced tool in both academic and practical scope.

Collaboration with businesses is paramount in this phase, as the goal is to make a seamless transition from understanding complexities to proposing practical solutions and ensuring their acceptance and applicability in the real world. We contend that this is a testament to the dynamic nature of ARM, contributing not only to theoretical understanding but also to tangible impact in the field of business research.

Figure 1. Overview of the two categories of ARM



Methodology

The key questions underlying the usage of Accelerated Research Methodology should be based on the following ideal questions.

RQs	*Description*
RQ1	What would effective accelerated business research look like?
RQ2	How do new technologies facilitate this process?
RQ3	How can we measure success?

The approach to reasoning is primarily abductive as grounds the theoretical understanding of the issues, contexts and participants involved, in the meaning and perspectives that form their view of the social world. This involves selecting the best interpretation of data as new discoveries are revealed in a logical and methodological way (Reichertz, 2007; Briant and Charmaz, 2007; Omeihe, 2019; Omeihe and Harrison, 2024).

We understand the research area in which the study is taking place but have no fixed hypothesis that we wish to test, so our approach to this problem is firmly based on Pragmatism, recognising that the most important determinant is the research problem and research question, not the theoretical approach (Patton, 1990; Cherryholmes, 1992; Morgan, 2007; 2014).

We have adopted the mantra that 'instead of focussing on methods, researchers use all approaches available to understand the problem (Cresswell & Cresswell, 2018) which naturally leads us to a Mixed Methods study that gathers as much information as possible from stakeholders on both sides of the rigour/relevance divide (academics, businesses and other stakeholders including those providing professional support to businesses or academics) to break down a research project into constituent parts that can then be evaluated for the likelihood that they can be productised.

The methods employed to gather this data are likely to include.

Data collection
Surveys-What do businesses actually need from research?
Interviews and workshops with both academics and businesses
Within-site displays to ensure a comprehensive review of data sources and inform readers about the generation of themes
Co-production of a proposed research process with a shortened timeframe that can then be piloted on 'live' research with businesses
Validation of proposed Methodology by using it to produce papers for peer review.

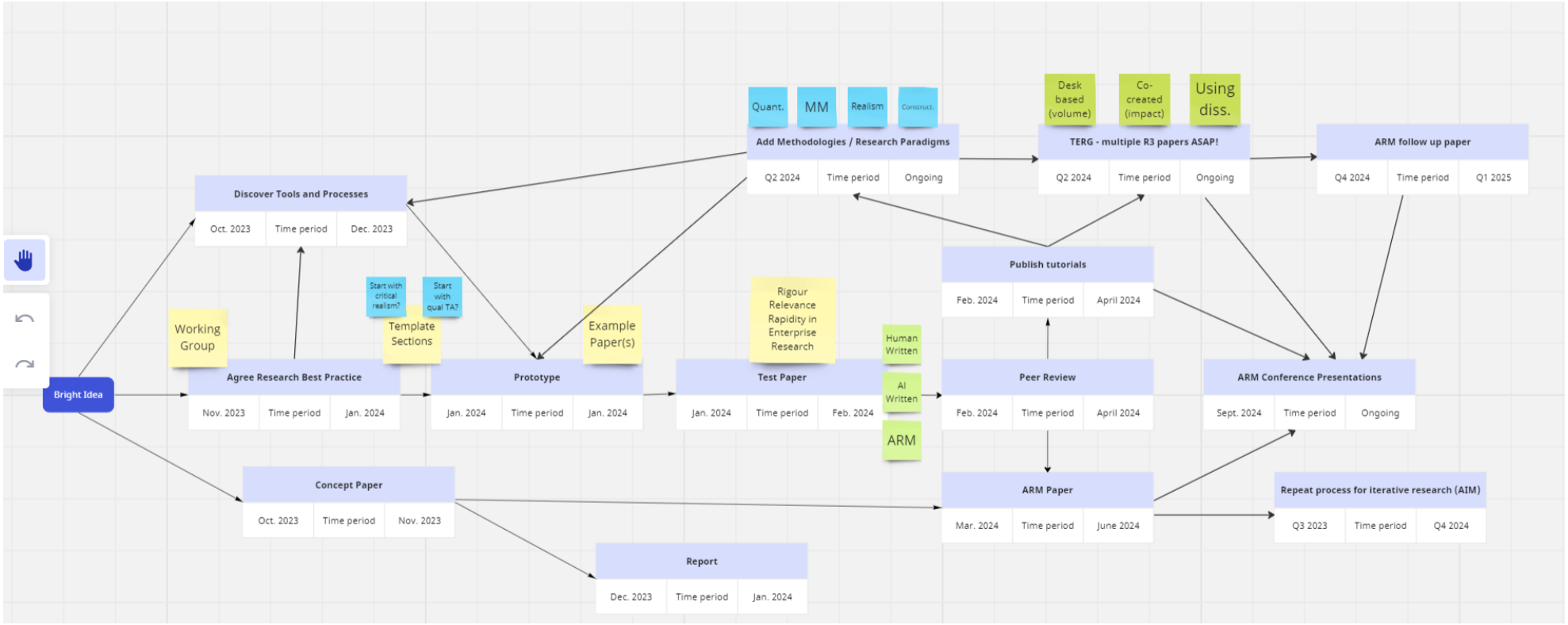
Timeline

This is an ongoing, long-term process – understanding customer (stakeholder) needs and iteratively reacting to them is an important part of a productisation project. This process started in October 2023, initial outputs can be expected in Q1 2024 and then ongoing development throughout 2024 and 2025.

There are several interlinked workstreams that make up this project, as shown in Figure 2. There is an academic explanation and justification strand, made up of a concept paper, working paper, full journal paper submission and supporting conference presentations. There is a practical exploration strand, discovering available tools and techniques alongside defining best practice elements in the research process, and deploying these tools and processes in a 'productised' research process.

Finally, there is an empirical strand, where we test the methodology through peer review and practical application.

Figure 1. Timeline and overview of several interlinked workstreams



References

- *Alvedalen, J. and Boschma, R., 2017. A critical review of entrepreneurial ecosystems research: Towards a future research agenda. European planning studies, 25(6), pp.887-903.*
- *Autio, E., Nambisan, S., Thomas, L.D. and Wright, M., 2018. Digital affordances, spatial affordances, and the genesis of entrepreneurial ecosystems. Strategic Entrepreneurship Journal, 12(1), pp.72-95.*
- *Beech, N., MacIntosh, R. and MacLean, D., 2010. Dialogues between academics and practitioners: The role of generative dialogic encounters. Organization Studies, 31(9-10), pp.1341-1367.*
- *Beech, N., Mason, K.J., MacIntosh, R. and Beech, D., 2022. Learning from each other: Why and how business schools need to create a "paradox box" for academic–policy impact. Academy of Management Learning & Education, 21(3), pp.487-502.*
- *Cabanac, G. and Labbé, C., 2021. Prevalence of nonsensical algorithmically generated papers in the scientific literature. Journal of the Association for Information Science and Technology, 72(12), pp.1461-1476.*
- *Cavallo, A., Ghezzi, A. and Balocco, R., 2019, 'Entrepreneurial ecosystem research: present debates and future directions', International Entrepreneurship and Management Journal, 15(4), pp. 1291–1321. Available at: https://doi.org/10.1007/s11365-018-0526-3.*
- *Chattopadhyay, N. 2012. Productisation of service: A case study, International Journal of Advanced Computer Science and Applications, 3: pp.197 - 201.*
- *Cherryholmes, C. 1992. Notes on pragmatism and scientific realism, Educational Researcher, 14: pp. 13 - 17.*
- *Chubb, J., Cowling, P. and Reed, D., 2022. Speeding up to keep up: exploring the use of AI in the research process. AI & society, 37(4), pp.1439-1457.*
- *Cresswell, J., and Cresswell, D. 2018. Research Design: Qualitative, Quantitative, and Mixed Methods Approaches, London: SAGE*
- *Currie, G.M., 2023, May. Academic integrity and artificial intelligence: is ChatGPT hype, hero or heresy?. In Seminars in Nuclear Medicine. WB Saunders.*
- *da Silva, J.A.T., 2023. Is ChatGPT a valid author?. Nurse Education in Practice, 68*
- *Deom, N., Clark, S.E., Johnson, G.A. and Vindrola-Padros, C., 2023. Rapid research in action: lessons from the field. Frontiers in Sociology, 8*
- *Dwivedi, Y.K., Kshetri, N., Hughes, L., Slade, E.L., Jeyaraj, A., Kar, A.K., Baabdullah, A.M., Koohang, A., Raghavan, V., Ahuja, M. and Albanna, H., 2023. "So what if ChatGPT wrote it?" Multidisciplinary perspectives on opportunities, challenges and implications of generative conversational AI for research, practice and policy. International Journal of Information Management, 71*
- *Dwivedi, Y.K., Hughes, L., Ismagilova, E., Aarts, G., Coombs, C., Crick, T., Duan, Y., Dwivedi, R., Edwards, J., Eirug, A. and Galanos, V., 2021. Artificial*

Intelligence (AI): Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy. International Journal of Information Management, 57

- *Eden, C. and Huxham, C., 1996. Action research for management research. British Journal of management, 7(1), pp.75-86.*
- *Gibbons, M., 2000. Mode 2 society and the emergence of context-sensitive science. Science and public policy, 27(3), pp.159-163.*
- *Harkonen, J., Haapasalo, H. and Hanninen, K., 2015. Productisation: A review and research agenda. International Journal of Production Economics, 164, pp.65-82.*
- *Harkonen, J., Tolonen, A. & Haaspalo, H. 2017. Service productisation: systematising and defining an offering, Journal of Service Management, 28: pp. 936 - 71.*
- *Hernandez M. and Haack P., 2023, Theorizing for Positive Impact. Academy of Management Review. 48(3)*
- *Hodgkinson, G.P., Herriot, P. and Anderson, N., 2001. Re-aligning the stakeholders in management research: lessons from industrial, work and organizational psychology. British journal of Management, 12, pp.S41-S48.*
- *Hodgkinson, G.P. and Rousseau, D.M., 2009. Bridging the rigour–relevance gap in management research: It's already happening!. Journal of Management Studies, 46(3), pp.534-546.*
- *Imran, M. and Almusharraf, N., 2023. Analyzing the role of ChatGPT as a writing assistant at higher education level: A systematic review of the literature. Contemporary Educational Technology, 15(4)*
- *Jaakkola, E., 2011. Unraveling the practices of "productization" in professional service firms. Scandinavian journal of management, 27(2), pp.221-230.*
- *Järvi, K., 2016. Productization of knowledge-intensive business services: A managerial perspective. http://urn.fi/URN:ISBN:978-952-60-6890-9*
- *Järvi, K. and Toivonen, M. 2020. Productisation of services: What, why and how? Helsinki University of Technology, BIT Research Centre. Available Online at https://www.researchgate.net/publication/266223799_Productisation_of_services_What_why_and_how. [accessed 22/04/20]*
- *Kallio, K.-M., Kallio, T. J., Tienari, J., & Hyvönen, T. (2016). Ethos at stake: Performance management and academic work in universities. Human Relations, 69(3), 685-709. https://doi.org/10.1177/0018726715596802*
- *Kieser, A. and Leiner, L., 2009. Why the rigour–relevance gap in management research is unbridgeable. Journal of Management Studies, 46(3), pp.516-533.*
- *Lahy, A., Li, A., Found, P., Syntetos, A. Wilson, M., and Ayiomamitou N. 2017. Developing a product-service system through a productisation strategy: a case from the 3PL industry, International Journal of Production Research, 56: pp. 2233-49.*
- *Leoni, L. 2015. Servitization and Productization: two faces of the same coin? In. Tor Vergata University of Rome.*

- *Livberber, T., 2023. Toward non-human-centered design: designing an academic article with ChatGPT. Profesional de la información, 32(5).*
- *MacIntosh, R., Mason, K., Beech, N. and Bartunek, J.M., 2021. Delivering impact in management research: When does it really happen?. Routledge.*
- *Markusen, A., 2003. Fuzzy concepts, scanty evidence, policy distance: the case for rigour and policy relevance in critical regional studies. Regional studies, 37(6-7), pp.701-717.*
- *McKenna, S., 2020. The rise of the executive dean and the slide into managerialism. Educational Research for Social Change, 9(SPE), pp.78-91.*
- *Morgan, D. 2007. Paradigms lost and pragmatism regained: Methodological implications of combining qualitative and quantitative methods, Journal of Mixed Methods Research, 1: pp. 48 - 76.*
- *Morgan, D. 2014. Pragmatism as a Paradigm for Social Research, Qualitative Inquiry, 20: pp. 1 - 9.*
- *Morgan, M.J. & Finkelstein, J. (2017) The changing status of higher education in the 'moronic inferno', Perspectives: Policy and Practice in Higher Education, 21:4, 144-149, DOI: 10.1080/13603108.2016.1181118*
- *Muñoz, P. and Dimov, D., 2023. A translational framework for entrepreneurship research. Journal of Business Venturing Insights, 19*
- *Muñoz, P., 2021, JBVI ER3 - entrepreneurship rapid Response research initiative – call for papers J. Bus. Ventur. Insights, Available at: https://www.journals.elsevier.com/journal-of-business-venturing-insights/call-for-papers/jbvi-er3-entrepreneurship-rapid-response-research-initiative*
- *Murray, A., 2019, 'Supporting academic entrepreneurship: a blueprint for a university based business incubator', Journal of Higher Education Service Science and Management, Volume, 2(2).*
- *Nicholls, H., Lamb, D., Johnson, S., Higgs, P., Pinfold, V & Billings, J., 2023 "Fix the system… the people who are in it are not the ones that are broken" A qualitative study exploring UK academic researchers' views on support at work." Heliyon.*
- *Omeihe, K. (2019). Trust, SME internationalisation and Networks A study of three main Nigerian cultural blocs. University of the West of Scotland. https://ethos.bl.uk/OrderDetails.do?uin=uk.bl.ethos.787868.*
- *Omeihe, K.O and Harrison, C. (2024) Qualitative Research Methods for Business Students.A Global Approach. Sage (Forthcoming).*
- *Parker, M., 2018, Shut Down the Business School: What's Wrong with Management Education. United Kingdom: Pluto Press.*
- *Patrício, L.D. and Ferreira, J.J., 2022, 'How Universities' Dynamics and Initiatives Are Related to Entrepreneurial Ecosystems: A Systematic Literature Review', International Review of Entrepreneurship, 20(1), pp. 87–136*
- *Patton, M. 1990. Qualitative evaluation and research methods, Beverley Hills: SAGE*
- *Perkmann, M. et al., 2021, 'Academic engagement: A review of the literature 2011-2019', Research Policy, 50(1), p. 104114. Available at: https://doi.org/10.1016/j.respol.2020.104114.*

- *Pettigrew, A.M., 2001. Management research after modernism. British journal of management, 12, pp.S61-S70.*
- *Pinar, M. and Horne, T.J., 2022. Assessing research excellence: evaluating the Research Excellence Framework. Research Evaluation, 31(2), pp.173-187.*
- *Polonsky, M.J. and Rotman, J.D., 2023. Should Artificial Intelligent Agents be Your Co-author? Arguments in Favour, Informed by ChatGPT. Australasian Marketing Journal, 31(2), pp.91-96.*
- *Rodenburg, K., Rizwan, T., Liu, R., & Hughes, J., 2021. Enhancing the positive impact rating: a new business school rating in support of a sustainable future. Sustainability, 13(12), 6519.*
- *The Royal Society, 2018, The impact of artifcial intelligence on work. https://royalsociety.org/-/media/policy/projects/ai-andwork/evidence-synthesis-the-impact-of-AI-on-work.PDF. Accessed 12 Oct 2023*
- *The Royal Society, 2019, The AI revolution in science. https://royalsociety.org/-/media/policy/projects/ai-and-society/AI-revolutionin-science.pdf Accessed 12 Oct 2023*
- *Rynes, S.L., Bartunek, J.M. and Daft, R.L., 2001. Across the great divide: Knowledge creation and transfer between practitioners and academics. Academy of management Journal, 44(2), pp.340-355.*
- *Scaringella, L. and Radziwon, A., 2018, 'Innovation, entrepreneurial, knowledge, and business ecosystems: Old wine in new bottles?', Technological Forecasting and Social Change, 136, pp. 59–87. Available at: https://doi.org/10.1016/j.techfore.2017.09.023.*
- *Schiele, H., Krummaker, S., Hoffmann, P. and Kowalski, R., 2022. The "research world café" as method of scientific enquiry: Combining rigor with relevance and speed. Journal of business research, 140, pp.280-296.*
- *Seelos, C., Mair, J., & Traeger, C., 2022. The future of grand challenges research: Retiring a hopeful concept and endorsing research principles. International Journal of Management Reviews.*
- *Sharma, G., Munoz, P. & Chen, S., 2021 How Rapid Research Can Create Practical Impact, Network for Business Sustainability, Available Online: https://nbs.net/how-rapid-research-can-create-practical-impact/ [Accessed 17th October 2023]*
- *Stam, E. and Spigel, B., 2018, Entrepreneurial ecosystems. In: Blackburn R, De Clercq D, Heinonen J (eds) The SAGE handbook of small business and entrepreneurship. SAGE, London, pp 407–422*
- *Stam, E. and van de Ven, A., 2021, 'Entrepreneurial ecosystem elements', Small Business Economics, 56(2), pp. 809–832. Available at: https://doi.org/10.1007/s11187-019-00270-6.*
- *Starkey, K. and Madan, P., 2001. Bridging the relevance gap: Aligning stakeholders in the future of management research. British Journal of management, 12, pp.S3-S26.*
- *Thorp, H.H., 2023. ChatGPT is fun, but not an author. Science, 379(6630), pp.313-313.*
- *Tkachenko, O., Hahn, H.J. and Peterson, S., 2016. Theorizing the research-practice gap in the field of management: A review of key frameworks and*

models. Bridging the scholar-practitioner gap in human resources development, pp.101-119.

- *Tuffee, R. and Little, J., 2023, The Entrepreneurial Campus. The Scottish Government. Available at: https://www.gov.scot/publications/entrepreneurial-campus-higher-education-sector-driving-force-entrepreneurial-ecosystem/documents/ (Accessed: 13 July 2023).*
- *UKRI (2021) Transforming our world with AI. https://www.ukri.org/wp-content/uploads/2021/02/UKRI-120221-TransformingOurWorldWithAI.pdf Accessed 12 Oct 2023*
- *Van de Ven, A.H., 2007. Engaged scholarship: A guide for organizational and social research. Oxford University Press, USA.*
- *Wood, T., Souza, R. and Caldas, M.P., 2022. The relevance of management research debate: a historical view, 1876–2018. Journal of Management History, 28(3), pp.409-427.*
- *Wurth, B., Stam, E. and Spigel, B., 2022. Toward an entrepreneurial ecosystem research program. Entrepreneurship Theory and Practice, 46(3), pp.729-778.*
- *Yeo-Teh, N.S.L. and Tang, B.L., 2023. Letter to Editor: NLP systems such as ChatGPT cannot be listed as an author because these cannot fulfill widely adopted authorship criteria. Accountability in research, pp.1-3.*