

This is a repository copy of *Management Consultancy: The Power to Unleash Natural Capital Thinking*.

White Rose Research Online URL for this paper:

<https://eprints.whiterose.ac.uk/199871/>

Version: Published Version

---

**Article:**

Williams, Christopher, Conner, N and You, Jacqueline (2021) Management Consultancy: The Power to Unleash Natural Capital Thinking. *Management Consultancy Journal*. pp. 72-81. ISSN 2631-987X

<https://doi.org/10.2478/mcj-2021-0014>

---

**Reuse**

This article is distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs (CC BY-NC-ND) licence. This licence only allows you to download this work and share it with others as long as you credit the authors, but you can't change the article in any way or use it commercially. More information and the full terms of the licence here: <https://creativecommons.org/licenses/>

**Takedown**

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing [eprints@whiterose.ac.uk](mailto:eprints@whiterose.ac.uk) including the URL of the record and the reason for the withdrawal request.

---

## **Management Consultancy: The Power to Unleash Natural Capital Thinking**

*Christopher Williams, Nicholas Conner, & Jacqueline Jing You*

---

### **Introduction**

*“Financial systems have a lot in common with natural world systems. Both are economies. If you deal with your investment... it's fine if you can take the profit, you take the investment, but you wouldn't be so silly as to eat into the capital. But that is what we're doing with the natural world all the time.” (Sir David Attenborough, address to IMF & World Bank, 2019)*

Much has been written about the impact of the management consultancy industry. Dealing in the business of thought leadership and the latest ideas (Sturdy, 2011), management consultancy is also a highly diverse industry and can be extremely innovative (Williams, 2019). Researchers have explored how management consultants achieve success in what is also a highly competitive and cut-throat sector. Success can be viewed in various ways, but is most commonly spoken of in terms of client satisfaction, repeat business, high utilization rates, and having a positive impact on client organizations in financial terms. Commentators note the importance of human capital in the industry (Von Nordenflycht, 2010), social capital (both internally and externally with clients) (Mors, 2010), and organizational capital (finding new ways of organizing and structuring client engagements, including virtually) (Williams, 2019).

Harnessing these different forms of capital has allowed the industry to innovate and continually change. As a consequence, new entrants have emerged, while some incumbents disappear or become absorbed into larger entities. For the larger players, maintaining relevance to client issues has been a defining theme, influencing the direction of change. This is conspicuous in the creation of new types of practice areas in larger firms, most recently in areas such as digital transformation, blockchain technology and AI.

Another relatively new type of practice area seen in management consultancy firms relates to sustainability, the environment and climate change. These themes have permeated society and economies globally, as have clients' levels of uncertainty and

anxiety about how to deal with them. Large management consultancy firms have entered this space in a visible way, seeking to compete through new advisory services that clients will trust and value because they relate to how they deal with environmental issues and are perceived to do so.

We believe this Special Issue of Management Consulting Journal on International Consultants' Day is an ideal opportunity to reflect on the role of the management consultancy industry, not in human, social, and organisational capital terms, but rather in natural capital terms. This is not about how management consultancy firms themselves manage their impact on the natural environment – we will leave that to others to pursue – but rather about how management consultants can help to put natural capital thinking at the heart of client relationships across all practice areas and client engagements.

## **Natural Capital Thinking**

Nature capital refers to “the world’s stocks of natural assets which include geology, soil, air, water and all living things” (Natural Capital Forum, 2021). Since its coining in 1973, the term has entered popular usage (Schumacher, 1973). However, ‘natural capital’ has different meanings for different groups. Environmental economists and national accountants treat natural capital as a stock of environmental assets used in the production of goods and services by business, government and wider society. Natural capital flows to users (who derive benefits from its use) in the form of ecosystem services. These ecosystem services (e.g., healthy air, clean water, food, timber, regulation of climate change and flood risk) contribute to human welfare (Costanza et al., 1997). The economic value of ecosystem services can be measured, and the value of the natural capital stock can be derived from the value of the services obtained from its use. A contrary view is that nature cannot be considered in the same way we think of financial capital (shares, loans, financial instruments), or produced capital (buildings, physical infrastructure, inventory). Under this view, nature instead has intrinsic and inherent value, it cannot (and should not erroneously) be quantified, monetized, or treated as another form of capital and regarded as tradable between owners and users (see Barton et al. 2019, p24).

Despite their differences, both these views are linked by a concern that the finite and interdependent nature of ecosystems, nature resources, and biophysical processes is not adequately understood or addressed in public and private sector planning, policy and operations. A major consequence of this long-term lack of understanding is that the ability of these ecosystems, natural resources and biophysical processes to continue to be the source of goods and services for business and the community is becoming severely compromised. Without adequate reinvestment in natural capital in the form of protection, conservation, reduction of pollution and overuse, the decline of the stock of natural assets will create major risks to business supply chains, and declining economic and social wellbeing for communities.

As well as the effects of environmental damage on the quality of natural capital and associated ecosystem services, unsustainable human interaction with the natural

environment is also leading to changes in the biophysical processes on which life depends, such as climate circulation, carbon storage, sea temperature, reproduction and development in fish species, and catchment runoff. Changes to biophysical processes pose serious global implications for humankind. Indeed, Global Risks reports by the World Economic Forum show a number of persistent threats faced by humankind, including water crises, natural disasters, extreme weather events, failure of climate-change mitigation and adaptation, and weapons of mass destruction, among others (World Economic Forum, 2018). Four out of the top five risks relate to the environment.

There is nothing new about bringing a natural capital perspective into a discussion on various forms of capital. Writers in environmental science have been doing this for decades (see Scoones, 1998). Natural capital concerns nature, biodiversity, and land and natural resources. These are assets which individuals, businesses, and communities the world over depend on for a safe and healthy existence (Scoones, 1998). Traditionally, impacts on these assets have been regarded as the concern of a relatively narrow set of economic actors i.e. landowners and managers, the agricultural sector, and conservation agencies. However, recent years have seen increasing environmental awareness internationally, and more widespread and popularised attention to the issues surrounding impacts on natural systems and natural capital. Pervasive environmental impacts from pesticide and microplastic accumulation in marine and terrestrial food chains and in humans have been brought to international attention through television documentaries and campaigns such as those led by Sir David Attenborough. Examples of environmental disasters caused by actions and mismanagement by private sector corporations such as the BP Deepwater Horizon ocean oil spill in 2010 come to mind.

Commentators note how modern industrial agricultural practices have degraded up to two-thirds of the earth's land, while the world's 3000 largest corporations generate more than US\$ 2 trillion in costs associated with environmental damage borne by third parties per year, equal to 4% of global GDP (Dyck & Silvestre, 2018). Industrial disasters (e.g., Chernobyl, Exxon Valdez, and Mariana Dam Disaster) and anthropogenic hazards (e.g., carbon dioxide emission, land degradation, deforestation) also adversely affect the stock of natural capital. This has put a spotlight on extractive industries that are commonly viewed as having unacceptable impacts on the environment. The combination of improved corporate environmental management, environmental compliance reporting, and public sector mitigation requirements and regulations is helping progress towards a reduction of such unsustainable impacts on natural capital.

However, despite corporate espousal of less environmentally damaging resource extraction and processing practices, the concept of protecting and maintaining stocks of the natural capital appears to be somewhat paradoxical in the case of non-renewable resources. Governments which look to the exploitation of non-renewable resources as a key component of their economic development strategies, may face difficulties in reconciling resource development with the need to protect their nation's natural capital and its associated ecosystems.

## **Implications for the Management Consultancy Industry**

### **Why should all of this matter to the management consultancy industry?**

First and foremost, environmental degradation and loss of natural capital has major implications for private sector businesses, large and small, in a wide range of sectors and locations. It affects their subsequent distribution and value chains throughout the global economy. This constitutes an enormous and highly complex base of strategic uncertainty and anxiety amongst clients, one in need of lasting solutions. There are clear implications particularly for firms in natural resource dependent sectors. These include inshore and offshore commercial fisheries and aquaculture. Changing currents, fish migration patterns, species composition, and ocean acidification affecting micro-invertebrate food sources have far-reaching impacts. Similarly, in agriculture, issues relating to soil erosion, rainfall patterns, temperature, pathogens, and plant and animal diversity impact both agricultural businesses and their buyers, including large international companies. Other industries are also affected. These include pharmaceuticals (where environmental degradation can lead to a loss of genetic material), real-estate (where coastal property is put at risk due to erosion, flooding and wildfires), tourism and eco-tourism (which suffer through degradation of natural attractions), manufacturing (where reduced supplies and increased cost of raw materials destroy value), and financial services (where lenders and investors are exposed to the issues in these sectors).

Secondly, environmental degradation has serious implications for the public sector and government policy, also an enormous market segment for the consultancy industry globally. Its effects are acutely felt in the area of public health, where pathogens, rising temperatures, and epidemics that emanate from a lack of understanding of the natural world, can cause considerable human suffering. Government departments involved in the following policy areas are also troubled by declines in natural capital: biodiversity conservation, where there is a need to protect the boundaries of national parks as well as species corridors for migration, and measures to prevent entire species extinction; agricultural and fisheries policy, where changing weather patterns affect aquaculture, fish migration, biosecurity, food production and the overall cost of food; land use policy, which has to address the devastating effects of coastal flooding and storms on infrastructure (including ports, pipelines, roads, bridges, and railways). If left unchecked, or if addressed only through ill-conceived and ill-informed policy, the negative impact on economic development, government revenue, and budgets for service provision will worsen.

Thirdly, the 'international institutional umbrella', which consists of local, national and international governance institutions working together to address global environmental degradation, is still evolving. One historic international institutional event was the Paris Agreement in 2016 concerning climate change. Here we see a formal recognition of the problem and a ratification by 55 United Nations Framework Convention on Climate Change (UNFCCC) countries that account for 55% of emissions. However, the involvement of key countries, such as the USA, has been shown to be dependent on the views of transient politicians. And the achievement of the agreement's goals will be

determined in large part by policy and actions in countries that are not signed up to the agreement.

These following three domains (private sector firms, national government policy, and evolving international institutional collaborations and agreements) represent important client bases for the global management consultancy industry. There is clearly enormous value to be unlocked by promoting natural capital thinking within and between these three domains (see Figure 1). Natural capital issues in these client bases have become sources of long-term uncertainty and anxiety. And there are few – if any – industries better positioned to promote natural capital thinking in an integrated and value-enhancing way across these domains than the global management consultancy industry.



Figure 1: Natural capital thinking and three major client bases for management consultancy

## Build on What's Already There... and Amplify Through the Power and Reach of the Consultancy Industry

Many management consultants will already be aware of the aforementioned issues, potential remedies (mainly short-term ones), and the value and importance of addressing different client issues relating to natural capital. But how can an industry as large, fast-growing, competitive, innovative and diverse as management consultancy contribute to the diffusion of natural capital thinking for the long-term benefit of clients, the profession and the planet? How can management consultancy - as an industry - respond? We argue the answer will lie in (1) building on the various elements of disparate thinking and experience at different levels and in different contexts that are already there, and then (2) using the power, reach and influence of the consultancy profession to accelerate, promote and learn from the diffusion of natural capital thinking on a global basis.

Firstly, in the terms of what is 'already there', a number of aspects are relevant. There has been, for instance, a conspicuous and growing corporate interest in natural capital. Environmental profit and loss statements have become popular. These can be used for

valuing the environmental impacts of a business across an entire supply chain – from raw material extraction through to sales – in monetary terms. A notable example is the case of Kering Group and sustainable luxury (Pavione et al., 2016). This case shows a company that investigates where it sources its raw materials from across the supply chain; an activity that led to the replacement of conventional materials with alternatives with a lower environmental footprint. The initiative involved looking at climate and air emissions, energy, land, materials and resources, waste and water management. Kering established ‘Kering Standards’; environmental and social standards for manufacturing processes and raw materials that must be met by existing/future partners/suppliers. The company’s 2025 Strategy aimed for the group to reduce its environmental footprint by 40% across its supply chain, by 50% for greenhouse gases, and to fully trace all its raw material inputs.

In other areas, there are guidelines for government and private sector investors on including natural capital thinking in their operations, with environmental-economic accounting being used for performance monitoring. Investors increasingly desire independent guidance on how to identify risk exposure from investments in unsustainable resource use (especially with respect to investment in agriculture; see Swift, 2020). This topic of guidance on sustainable financing for the investment sector has been growing apace.

There has also been a range of short-term private and public sector responses that underscore the importance of understanding the interface between ecology and economics (Turner and Daily, 2008). Included here are the triple bottom line approach (social impacts of activities, environmental impacts, financial profit and loss), risk assessments (especially for insurance companies), new building codes in flood-prone areas and for water and energy conservation, environmental impact assessments, banking sector risk assessments for vulnerable loans, and initiatives such as the UK’s Biodiversity Offsetting Pilots.

These examples of corporate and policy initiatives are clearly important, and reflect a pre-existing base of natural capital thinking in the global client base for management consultancy firms. However, many of these initiatives have been criticised as being too short-term. As Turner and Daily (2008) noted: “Markets...typically reward short-term values of natural resources (exaggerating the real opportunity costs of conservation) to the detriment of long-term ecological health and human welfare.” (Turner and Daily, 2008: 27). Nevertheless, certain institutional innovations are showing signs of increased adoption and the potential for long-term embedding into the strategic thinking of businesses, governments and international bodies. Amongst these, the Natural Capital Protocol (NCP) stands out.

The NCP provides a focal point for how the private and public sectors could engage with the UN Sustainable Development Goals. It also provides a basis for the management consultancy industry to engage more deeply than it has up to now. The NCP has an emphasis on sustainable supply chains (with various guidelines already produced and under production) (see <https://naturalcapitalcoalition.org/natural-capital-protocol/>). A recent and very important development in the natural capital world was the recent endorsement of the System of Environmental-Economic Accounting-Ecosystem Accounting (SEEA-EA) standard by the United Nations Statistical Commission (UNSC)

as an international statistical standard. The standard accompanies the SEEA Central Framework (CF) which was endorsed by UNSC in 2012; both provide a framework for companies to implement the protocols being progressed by the Capitals Coalition. The Capitals Coalition has evolved from the Natural Capital Coalition to now include consideration of human and social capital (see <https://capitalscoalition.org/>). Opportunities exist here for the management consultancy industry to work with different types of clients to mainstream these protocols in their operations. The NCP now includes sectoral guidelines that will need incorporating into client strategy, and translating into practice.

But perhaps the big game for management consultants, (and the big risk for 'greenwashing' in the profession), is with the sustainable finance/ investment sector (see <https://www.unepfi.org/ecosystems/nca/natural-capital-protocol-finance-sector-supplement/> and also British Standards Institution - Project ([bsigroup.com](http://bsigroup.com))). The SEEA CF and SEEA-EA are more relevant to the public sector, and require in-depth statistical and economic accounting skills and analysis that many consultancies are not able to obtain or support. An opportunity also exists for management consultants to assist companies to transition from only thinking about maximising returns to their financial and produced capital, to understanding how investment in their natural, social and human capital/assets will improve such returns in the long run.

Secondly, the power, reach, and influence of the management consultancy industry can be used to harness opportunities out of these existing building blocks of natural capital thinking, and shape the future of this approach. How many industries are as connected with C-Suite leaders in a vast array of industries and locations as the management consultancy industry? How many industries are as recognised as providing thought leadership and as having thought leading capabilities as the management consultancy industry? How many industries are as embedded in both the business and corporate worlds, the government and public worlds, and the international governance and global institutional worlds as the management consultancy industry? Clearly, the industry as a whole, and the larger, global players in particular, are in pole position to be key influencers in diffusing natural capital thinking in the 21st century.

However, we argue this is not as straightforward as it may sound. Organisational structures within the industry will have to change, and cultures and mindsets too. Playing a central role in the diffusion of natural capital thinking for the benefit of a wide-ranging spectrum of clients, for the profession itself, and for the environment, may not necessarily be compatible with some of the traditional ways of working in the industry. Playing this role effectively will not be just about opening a new practice area devoted to natural capital issues (which has happened in many firms), but transversally linking disparate practice and services areas with natural capital knowledge. It will not be the responsibility of one or a small number of partners, but rather a responsibility for each and every partner. The knowledge needed to operate in this space is broad, diverse, rooted in science, and continually being updated globally. This underscores the importance for individual consultancy firms to accept they cannot own all the knowledge assets needed to maintain leading positions as natural capital thought leaders. New organisational forms need to be considered, and working in dynamic partnerships with an array of specialists including earth scientists, conservationists, ecologists and environmental economists and accountants.



In terms of the culture of the profession, new mindsets are needed. First and foremost, this involves recognising nature as an asset. Like any other form of capital, natural capital needs reinvestment to continue to provide material economic, social and cultural benefits from its use. Recognising nature as a finite asset needs to be incorporated in decision making in all of the client domains. The prevailing mentality should be a realisation that nature is not infinite; there are no free lunches in an increasingly resource constrained environment in which natural resource allocation decisions come with opportunity costs. In this sense, having a mindset for economic valuation and natural capital accounting can help the management consultancy profession understand the environmental, social and economic dimensions of those costs as they apply to different types of clients.

## **Summary**

Natural capital thinking can help to guide coherent strategy across different types of economic actors in order to reverse environmental degradation. The management consultancy industry is ideally placed to develop and diffuse natural capital thinking on a global basis across multiple client bases, practice areas and project types. The orchestration that is needed between private sector, national governments, and international institutions can be achieved by management consultants because of the unique combination of human capital, social capital and organisational capital not found in other industries. However, the profession is likely to need to reflect and expect a certain level of upgrading, such that structures for handling environmental-economic accounts and statistics, the Natural Capital Protocol, and working with a broad array of scientific actors can be encouraged and optimised. This will be key to making the management consultancy industry synonymous with natural capital thinking in the 21st Century for the mutual benefit of clients, the profession, and the planet.

## References

- AG. 2017. Increasing investment in natural capital, Aldersgate Group, 2017, <https://www.cusp.ac.uk/wp-content/uploads/2017-11-Increasing-investment-in-natural-capital.pdf> accessed 26th April 2019.
- Barton D.N., Caparrós A., Conner N., Edens B., Piaggio M., Turpie J. (2019). Discussion Paper 5.1: Defining exchange and welfare values, articulating institutional arrangements and establishing the valuation context for ecosystem accounting. Paper drafted as input into the revision of the System of Environmental-Economic Accounting 2012– Experimental Ecosystem Accounting. Version of 25 July 2019.
- Costanza, R., d'Arge, R., De Groot, R., Farber, S., Grasso, M., Hannon, B., Limburg, K., Naeem, S., O'Neill, R.V., Paruelo, J. and Raskin, R.G., 1997. The value of the world's ecosystem services and natural capital. *Nature*, 387(6630), p.253.
- Dyck, B., & Silvestre, B. S. (2018). Enhancing socio-ecological value creation through sustainable innovation 2.0: Moving away from maximizing financial value capture. *Journal of Cleaner Production*, 171, 1593-1604.
- Mediamatters.org (2013) USA Today's Climate Change Series Comes at a Critical Time <https://www.mediamatters.org/blog/2013/03/01/usa-todays-climate-change-series-comes-at-a-critical-time/>
- Mors, M.L., 2010. Innovation in a global consulting firm: When the problem is too much diversity. *Strategic Management Journal*, 31(8), 841-872.
- Natural Capital Forum. (2021). World Forum on Natural Capital. Retrieved from Natural Capital Forum. Available at <https://naturalcapitalforum.com/about/#:~:text=Natural%20capital%20can%20be%20defined,which%20make%20human%20life%20possible>.
- Pavione, E., Pezzetti, R. and Matteo, D.A., 2016. Emerging competitive strategies in the global luxury industry in the perspective of sustainable development: The case of Kering Group. *Management Dynamics in the Knowledge Economy*, 4(2), 241-261.
- Schumacher, E. F. (1973). *Small is beautiful: Economics as if people mattered*. New York: Harper & Row.
- Scoones, I. (1998). *Sustainable Rural Livelihoods: A Framework for Analysis* (IDS Working Paper No. 72). Institute of Development Studies. <https://opendocs.ids.ac.uk/opendocs/handle/123456789/3390>
- Sturdy, A. (2011). Consultancy's consequences? A critical assessment of management consultancy's impact on management. *British Journal of Management*, 22(3), 517-530.

Swift B. (2020) Expect more scrutiny of farm climate plans. Farm Weekly..  
<https://www.farmweekly.com.au/story/6959281/expect-more-scrutiny-of-farm-climate-plans/>)

Turner, R.K. and Daily, G.C., 2008. The ecosystem services framework and natural capital conservation. *Environmental and Resource Economics*, 39(1), 25-35.

Von Nordenflycht, A., 2010. What is a professional service firm? Toward a theory and taxonomy of knowledge-intensive firms. *Academy of Management Review*, 35(1), 155-174.

Williams, C. (2019) *Management Consultancy for Innovation*, Routledge (Taylor & Francis Group).

World Economic Forum. (2018). *Global risks 2018 (13rd ed)*. Geneva, Switzerland: World Economic Forum. Available at  
[http://www3.weforum.org/docs/WEF\\_GRR18\\_Report.pdf](http://www3.weforum.org/docs/WEF_GRR18_Report.pdf)