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The institutional logic of the sustainable organisation: the case of a chocolate supply network

Kate McLoughlin

OTEHM, Manchester Metropolitan University, Manchester, UK, and

Joanne Meehan

Management School, University of Liverpool, Liverpool, UK

The
institutional
logics of
sustainability

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Abstract

Purpose – The purpose of this paper is to examine how, and by whom, institutional logics are determined in the action of sustainable organisation. The authors analyse a supply chain network structure to understand how multiple stakeholders' perceptions of sustainability emerge into a dominant logic and diffuse across an organisational field.

Design/methodology/approach – Stakeholder network theory provides novel insights into emerging logics within a chocolate supply chain network. Semi-structured interviews with 35 decision-makers were analysed alongside 269 company documents to capture variations in emergent logics. The network was mapped to include 63 nodes and 366 edges to analyse power structure and mechanisms.

Findings – The socio-economic organising principles of sustainable organisation, their sources of power and their logics are identified. Economic and social logics are revealed, yet the dominance of economic logics creates risks to their coexistence. Logics are largely shaped in pre-competitive activities, and resource fitness to collaborative clusters limits access for non-commercial actors.

Research limitations/implications – Powerful firms use network structures and collaborative and concurrent inter-organisational relationships to define and diffuse their conceptualisation of sustainability and restrict competing logics.

Originality/value – This novel study contributes to sustainable supply chain management (SSCM) through presenting the socio-economic logic as a new conceptual framework to understand the action of sustainable organisation. The identification of sophisticated mechanisms of power and hegemonic control in the network opens new research agendas.

Keywords Sustainability, Power, Supply chains, Networks, Institutional logics

Paper type Research paper

Introduction

Sustainability is increasingly positioned as the “new normal” in business and operations management (OM) (Roy *et al.*, 2018), although it remains a deeply political and socially constructed concept. The complexity and scale of sustainable supply chains require inter-organisational actors to coordinate operations, strategies, goals and critically – institutional logics (Sayed *et al.*, 2017). Institutional logics shape beliefs and behaviours and are defined as “the socially constructed, historical patterns of material practices, assumptions, values, beliefs and rules by which individuals produce and reproduce their material subsistence, organize time and space and provide meaning to their social reality” (Thornton and Ocasio, 1999, p. 804). Logics bring order to a field and explain its structure and action (Friedland and Alford, 1991). Institutional logics are a useful lens to reveal *how* organisations understand and implement sustainable operations across their supply networks. However, what remains unanswered in



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the literature is an understanding of how, and to what extent, dominant firms lead and influence these shared logics across a field, and more crucially, how might this matter?

This research identifies the institutional logics of sustainable supply chain management (SSCM) and explores the power structures that contribute to the development and diffusion of its logics. The empirical case context is a global chocolate supply network. Our focus on institutional logics responds to the call for further research of SSCM ideologies (Smart *et al.*, 2017). Institutional logics have a wide application in OM and have been used to: explain stakeholder behaviours (Beer and Micheli, 2017); assess inter-organisational relationships (Azadegan *et al.*, 2013) and to map a field's maturity (Rabetino *et al.*, 2018). The potential diversity of logics for SSCM is evident in the breadth of business models (Bocken *et al.*, 2014) and varying attitudes to stakeholders (Alvarez *et al.*, 2010; Busse *et al.*, 2017; Rowley, 2017), yet it is an under-developed area of research. Institutional logics contribute understanding and explanatory power to urgent societal concerns, including sustainability (Gümüşay *et al.*, 2020). However, progress in our field is hampered, as extant research has not made explicit the underpinning logics and ideologies of SSCM. By exploring institutional logics, we identify socioeconomic dimensions created from mechanisms of power that deepen our conceptual understanding of SSCM.

This paper considers how, in a global supply network, the core values and organising principles that frame sustainable organisation are shaped. We define *sustainable organisation* as the action of organising sustainability within the institution. Specifically, we examine how the logics that govern the definition and approach to sustainability are institutionalised across a supply network. The study is grounded in stakeholder network theory (SNT) to examine the structure of relationships, diffusion of practices and mechanisms of power (Rowley, 1997, 2017) that manifest the underpinning assumptions and values among multiple stakeholders in the supply network. For this study, the institution is the supply chain network encompassing the field of expertise and activities to organise sustainably therein.

We contribute to the conceptual development of SSCM by identifying the institutional logics of the action of sustainable organisation and revealing how logics act as a sophisticated mechanism of power shaping network behaviour beyond economic assumptions. The focus on institutional logics identifies the “paradigmatic core” of SSCM, which results from the evolution of institutional logics across the network (Fuenfschilling and Truffer, 2014, p. 772). From this vantage point, we show how alternative logics are restricted by the network position of powerful actors. Our study highlights the importance of what we have termed “concurrency”, whereby groups cluster *pre-competitively* to define sustainability principles and further, to orientate the network in their favour. This new concept is critical to the institutional logics of sustainable organisation, as the perspectives of multiple stakeholders, commercial and non-commercial, require consideration, but risk being impeded through dominant but narrowly framed economic logics. In the study, we aim to explore how, and by who, are institutional logics determined in sustainable organisation. Therefore, the research questions are: (1) what are the organising principles that underpin the institutional field? (2) who are the powerful actors that define these? and (3) how is network structure used to define and diffuse institutional logics?

The paper is organised as follows. The literature review outlines the current research on institutional logics and SSCM's organising principles and sources of power. A conceptual framework is developed using SNT to posit how organisations leverage their network position through centrality and density mechanisms to influence institutional logics. The methods adopted are explained and detailed. Empirical findings from the case study are presented and these are discussed against the features of institutional logics and dimensions of SNT. The theoretical contributions establish how organisations are fundamentally altering the organising principles of SSCM, and we reappraise the sources of power of multilateral, inter-organisational relationships derived from a socio-economic rationale.

Literature review

Institutional logics

Institutional logics consist of organising principles and sources of power (Thornton and Ocasio, 1999). For the purpose of this study, we differentiate between logics as practice and logics as organising principles, and our focus is on the latter, covering values, beliefs, rules and assumptions. We believe this distinction necessary, as practices, *commonly the focus for SSCM research*, are the behaviours formed by the organising principles. Logics as organising principles are the frameworks for reason that govern belief systems (Scott, 2001), and their sources of power shape a networks' practices and structure (Thornton and Ocasio, 1999). The organising principles that underpin SSCM practices have had scant attention in the field.

Dominant logics are those that take precedence in an institutional field (Gümüşay *et al.*, 2020). As the boundaries of institutional fields (which in this instance is the supply network) interplay and overlap, a paradigm shift can occur if alternative logics form and transform the dominant logics of another field. Institutional logics are inextricably linked to power and control, as they can legitimise profound change across a field (Suddaby and Greenwood, 2009). In commercial situations, dominant logics might predetermine the balance of value appropriation afforded to each party in a contract, but in broader contexts, including sustainability, there are consequences to this power play, particularly if the assumptions of the dominant logics are not acknowledged and considered.

The urgency and scale of the sustainability challenge, coupled with the lack of prior attention in the SCM field, necessitates change to SCM (Pagell and Shevchenko, 2014). The suggestion here is that the need for fundamental change to achieve SSCM requires the adoption of alternative logics. In dynamic and complex environments, multiple logics that are fragmented and contradictory are likely to co-exist (Suddaby and Greenwood, 2009), or they may be divergent or incompatible (Friedland and Alford, 1991; Thornton and Ocasio, 1999). Alternative logics become apparent during periods of transformation, which are characterised by heightened uncertainty, heterogeneity of fields, inter-organisational co-evolution, shifts in belief systems and new organisational forms (Lounsbury, 2002).

Institutional logics of SSCM

Sustainability's ideology necessitates shared value among social and economic actors (Silva and Figueiredo, 2017) as an instrumental precondition (Burger and Christen, 2011). It is within this context that multiple stakeholders with diverse heterophilous values and practices, operating within a network, redraw a system boundary to create sustainable stakeholder value. Scholars have long recognised the need for sustainability to adopt a change of mindset from competitive to collaborative advantages for multiple stakeholders across supply chains (Vachon and Klassen, 2008), yet insufficient attention has been paid to its conceptual foundations. Organising principles, as an element of institutional logics (Thornton and Ocasio, 1999), are situated a step back from practice, as the values that shape SSCM practice. It is at this deep, often unseen level of organising principles, that tensions between SSCM and "traditional" SCM priorities and metrics are situated. A lack of synergy between SCM and ethics-based research and theories (Quarshie *et al.*, 2016) and misaligned core logics between socially-oriented and commercial stakeholders (Longoni *et al.*, 2019) adds weight to the call for fundamental change in priorities and practice to enable SSCM (Pagell and Shevchenko, 2014).

Sustainability ideology, as a transformative logic across organisations, industrial networks and societal fields, is resulting in the emergence of a new organisational form – *sustainable organisation* – the action of organising sustainability within the institution (Fuenfschilling and Truffer, 2014). In organising sustainably, stakeholders' needs are not points to be resisted by individual firms (Rowley, 1997) or reconciled into their economic logics (Margolis and Walsh, 2003). Rather, sustainable organisation represents the collaboration of multiple stakeholders on

sustainability initiatives with logics beyond the commercial realm (Laasch, 2018; Schneider, 2015). Non-commercial actors can impose normative demands on the system and have been shown to advance the social dimensions of SCM through acting as a bridge between business and society (Rodríguez *et al.*, 2016), to broaden the spectrum of social issues that are considered and mainstreamed (Kelling *et al.*, 2020).

An emergent body of research recognises the importance of logics in the SSCM field (c.f. Nath *et al.*, 2020; Pullman *et al.*, 2018; Sayed *et al.*, 2017), with the complexity of competing or multiple logics being a common focus. The multiple logics related to sustainability in SCM are evident within the breadth of business models represented (Bocken *et al.*, 2014), the diversity of stakeholders (Miemczyk *et al.*, 2012; Seuring and Müller, 2008) and how environments are shaped through focal firms' attitudes towards stakeholder (Alvarez *et al.*, 2010; Busse *et al.*, 2017; Rowley, 2017). As logics partly determine which stakeholders are attended to (Crilly and Sloan, 2012), it is important that these are revealed and understood. While multiple stakeholders can facilitate the development of alternative logics that are essential for sustainability, organising complex supply chains with multiple logics exposes a gap in the SSCM research base around which actors define the organising principles that underpin the institutional field and the role of the network structure in diffusing these logics.

While progressive research has set out to show the different approaches to the logics of sustainable organisation (Nath *et al.*, 2020; Sayed *et al.*, 2017), two critical issues remain. First, while heterogeneous value logics are co-shaped by SCM and organisations (Laasch, 2018), privilege is given to economic theory and the role of business in understanding sustainability (Johnston *et al.*, 2007). Nascent discourses transcend the economic focus, in particular in the value-laden debates (Fuenfschilling and Truffer, 2014; Schneider, 2015), and applications of institutional theory (Pullman *et al.*, 2018; Sayed *et al.*, 2017). Therefore, SSCM research cannot assume economics as the defining force, despite the dominant hold it has had (Margolis and Walsh, 2003). Second, while the dimensions of sustainability are addressed in relation to practices, the implicit values and mechanisms that determine how the dimensions are handled remain under-scrutinised in supply chain and OM research. The theoretical development of SSCM is limited by the implicit economic assumptions in extant research; thus by continuing to study SSCM within the logic of SCM, we fail to capture and understand the fundamental differences of sustainability (Pagell and Shevchenko, 2014).

Sources of power in SSCM

Given the tensions of accommodating sustainability under an economic logic (Longoni and Cagliano, 2015) and the potential for alternative values, understanding how organisations gain and sustain power over logics is a critical gap in SSCM's development. While the seminal work of French and Raven (1959) has provided a foundation for understanding the bases of social power in intra-organisational settings, the SCM literature develops our knowledge on sources of power to direct inter-organisational commercial practices (c.f. Gold *et al.*, 2010; Marshall *et al.*, 2016; Meehan and Wright, 2012; Touboulis *et al.*, 2014). Supply chains are increasingly complex structures requiring vertical (Pagell and Wu, 2009) and horizontal alignment (Carter and Rogers, 2008) of multiple commercial and non-commercial stakeholders through the supply network (Alvarez *et al.*, 2010). Yet, SSCM typically focuses on focal firms (Golini and Gualandris, 2018; Meinschmidt *et al.*, 2018) who are considered, at least commercially, to hold the locus of power, orientation and decision-making across the supply chain (Seuring and Müller, 2008).

The power discourse has evolved beyond transactional and dyadic relationships bounded by hierarchical organisation, to a more nuanced view of social organisation (Hearnshaw and Wilson, 2013). Networks are increasingly seen as the "foundational unit of analysis" to understand the global economy and supply chains (Dicken *et al.*, 2001, p. 91), and research is

moving the focus from dyadic to network power (Johnsen *et al.*, 2020; Meqdadi *et al.*, 2019). In networks, decentralised social mechanisms and institutionalising organising principles allow for broader concepts of benefit, with gains accruing beyond channel leaders (Hearnshaw and Wilson, 2013).

The power dynamics between dominant and dependent actors determine a network's organising principles, and power imbalances shape economic practices for how sustainability standards are diffused (Gold *et al.*, 2020). Power to influence a network's organising principles brings institutional logics to the fore, as they play a key role in setting the rules, values and success criteria within the system. Hegemonic stakeholders are able to use dominance, authority and mastery to shape the legitimating ideas and norms within a network, whilst simultaneously limiting the articulation of alternative ideologies (Johnsen *et al.*, 2020). Control over logics can become hegemonic if a dominant firm's strategic agenda is accepted in the common interest through a lack of attention on values (Ben-Porat, 2005). Stakeholders' values can influence the mainstreaming of sustainability logics across an institution (Kelling *et al.*, 2020), although if these do not sufficiently accommodate the wellbeing of both human and environmental resources, progress is questionable (Silva and Figueiredo, 2017). In broader institutional contexts where there are misaligned social and commercial logics, relational mechanisms can contribute to managing tensions (Longoni *et al.*, 2019), adding further weight to the importance of reconceptualising SSCM in the context of sustainable organisation by accounting for power beyond that which is embedded in dyadic commercial contracts.

Stakeholder network theory (SNT)

SNT considers how network configurations affect power dynamics between a firm and its stakeholders (Rowley, 1997). As a source of pressure, the network constitutes the stakeholders who shape institutional rules. In doing so, SNT helps explain how the organisation relates to its institution. Supply chain networks represent the configuration of members and their links beyond dyadic ties of trading partners (Zhu *et al.*, 2018). There are calls for studies to use network-orientated mapping (Fabbe-Costes *et al.*, 2020) and a recognition that in supply networks, influence emerges and diffuses, rather than being determined by more directed, linear power mechanisms of any one party (Meehan and Bryde, 2015).

Network analysis allows power and the influence of multiple and interdependent relationships on logics to be studied (Law, 1990; Rowley, 2017). Power forces at play, within the network structure, affect behaviour (Rowley, 1997). The structural dominance of a firm within a supply network is a long-identified critical component of power (Cox, 1999). Yet, what is missing from the SCM literature is a recognition and understanding of the deep structures – the space where rules are historically and socially shaped (Thornton and Ocasio, 1999), and the protected spaces that allow for transformation and maturation of the institutional context (Fuenfschilling and Truffer, 2014). The complex array of actors and their interactions in SSCM requires exploration from a network perspective. Stakeholder relations are commonly examined in SSCM with interesting insights into governance (Alvarez *et al.*, 2010) and visibility (Busse *et al.*, 2017), but the network foci are still viewed, ultimately, through an economic focal company perspective (Svensson *et al.*, 2018).

SNT uses centrality and density as a schema to examine power through the structure of relationships, diffusion of practices and the influence on outcomes (Roy *et al.*, 2006). Centrality refers to an actor's relative position in the network based on direct and indirect ties and control over others (Rowley, 1997). The relative importance of a firm's reputational quality and informal power are indicative of the regime that constructs the logics. High centrality enables information to flow or be restricted, providing a source of power through controlling liaison between disparate players (Vurro *et al.*, 2009) and accessing information sources from multiple actors in the network (Meehan and Bryde, 2015). Density describes the network's

overall structure and connections (Lambert and Cooper, 2000). High-density links allow the diffusion and conformity of institutionalised norms (Vurro *et al.*, 2009). The diffusion of institutionalised norms increase efficiencies as denser links enable flow, communication and knowledge exchange; and the more central an organisation, the greater their ability to diffuse influence (Rowley, 1997). However, by increasing density to achieve these gains, this can conversely have a constraining effect on diversity, as norms are institutionalised limiting the development of alternative logics. Network analysis provides a framework for understanding the degree of institutionalism of dominant logics, and the variable degrees of centrality and density suggest transformative structures that enable alternative logics (Fuenfschilling and Truffer, 2014).

In sum, for SSCM, alternative sustainability principles and value propositions beyond an economic focus require examination. While extended boundaries of responsibility and the importance of multi-stakeholder collaboration are recognised in the extant literature, our knowledge of the foundations and values upon which sustainable organisation rests is scant. This leads us to our first research question: What are the organising principles that underpin the institutional field? Here we aim to identify the business models, stakeholder relationships and inter-organisational activities across the supply network that manifest the assumptions and values at play among multiple stakeholders. The inclusion of non-commercial stakeholders in the analysis provides opportunities for a richer understanding of network relationships and power and the impact these may have on shaping logics for sustainability. This leads us to our second research question: who are the powerful actors that define the organising principles? Given that logics are antecedent to SSCM practice, power is deeply embedded in how, and by whom, these develop. Rather than focussing on focal firm or contractual influence, our final research question asks: how is network structure used to define and diffuse institutional logics? The adoption of SNT captures measures of centrality and density to reveal wider relationship structures that may shed light on how the network enables institutional logics to be shaped and diffused.

Methods

This study explores the institutional logics of the chocolate supply chain. Case research is common in OM (Voss *et al.*, 2002) and is used in this study to understand how institutional logics related to sustainability emerge and diffuse within a supply network. In a mixed method approach, we use interviews, documentary evidence and social network analysis to examine the organising principles and sources of power within the chocolate supply network. Social network analysis is an analytical method for SNT (Hansen *et al.*, 2011) and is gaining popularity in the OM/SCM field as a method to analyse patterns of connectivity (Alinaghian *et al.*, 2020; Kim *et al.*, 2011; Wichmann and Kaufmann, 2016). Social network analysis is adopted to uncover the network structure and associated mechanisms of power.

Empirical context – the chocolate supply network

The world consumes over seven million tonnes of chocolate annually and the global chocolate confectionery market is worth over USD 114.33bn with the top five companies representing 52.4% of the market share in 2019 (Euromonitor International, 2020). The concentration of power has led to uneven value distribution across the supply chain (Barometer Consortium, 2016). To meet growing consumer demands, global cocoa production rose by 15% to approximately 4.6 million tonnes in 2017/18 (Fountain and Hütz-Adams, 2018). Over 70% of production is in the West African countries of Cameroon, Ghana, the Ivory Coast and Nigeria, approximately 17% in the Americas, i.e. Brazil, Columbia, Dominican Republic and Ecuador and 9% from Asia and Oceanica (Franchise Help, 2020). It is within these developing

countries that sustainability issues come into relief. Climate change and socio-political effects have put a strain on production, farmers, communities and the environment (Fountain and Hütz-Adams, 2018). More than five million farmers and nearly 50 million workers are dependent on cocoa, a highly volatile commodity, and many workers are among the 2.01 billion people living on less than £1.48 a day (Fairtrade International, 2018).

The chocolate supply chain has five broad tiers through which the core commodity, cocoa, is grown, processed, manufactured, packaged and retailed as chocolate (Figure 1) (Fountain and Hütz-Adams, 2018). Despite a relatively simple and linear product flow, the network consists of multiple commercial and non-commercial organisations. The primary commercial companies are classified as farmers/farming associations, traders/processors, manufacturers and retailers. The secondary commercial companies are classified as packaging, third-party logistics providers and warehousing. Non-commercial partners consist of non-governmental organisations (NGOs), certifiers, national and local governments, international governmental organisations and trade unions.

Data collection and analysis

Phase 1. Network mapping. The mapped network included connections among 63 stakeholders collaborating for sustainable organisation. The research design is summarised in Table 1. The population parameter was network stakeholders, representative of organisations that capture commercial and non-commercial values. The inclusion of non-commercial stakeholders in the research design was essential to capture multiple logics. National governments while playing regulatory and fiscal roles were not within the scope of this study, although their role has been studied by others (c.f. Annala et al., 2019). The units of observation were purposely selected due to (1) their activities or expertise with the phenomenon of sustainable organisation in the institution and (2) the values of sustainable organisation represented by the range of organisational types. FAME and Euromonitor databases provided comparative profiles of organisations including size, industry, location and corporate structure.

Nodes are treated as discrete structural objects and were examined to map network relationships. A snowballing technique, as recommended by Rowley (1997), was used to map the nodes and edges that defined the network boundaries and capture the institutional field’s organisations and relationships. Node ties explained the organisational activities of interorganisational relationships. It was not within the resources of this study to examine every discrete event/interaction occurring over a period of time, and the focus was on establishing the quality of ties (Borgatti et al., 2018). A total of 63 network nodes and their 366 edges were mapped. Further mapping followed the coding phase.

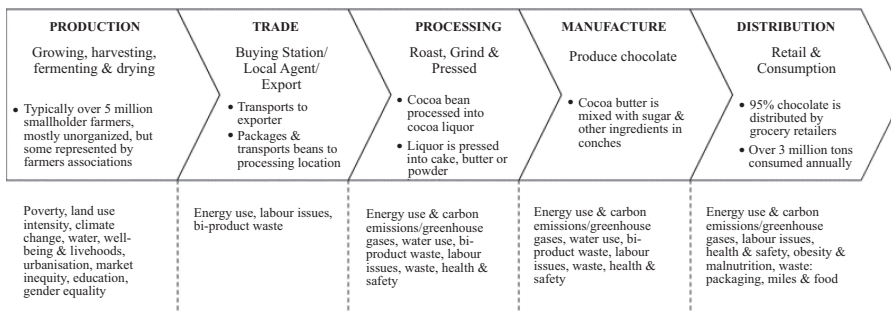


Figure 1. The chocolate supply chain and primary sustainability impacts

Research design	Example in study	Rationale
Unit of analysis	Chocolate supply chain network	The supply chain network is the institution to determine the institutional logics of sustainable organisation
Units of observation	63 organisations (1) 28 commercial <ul style="list-style-type: none"> • nine retailers • eight manufacturers • five farming associations • five traders/processors • one packager (2) 35 non-commercial <ul style="list-style-type: none"> • 19 non-profit organisations • nine trade associations • seven certifiers 	Captures the diversity of organisational types and varying sustainability values
Level of analysis	Sustainable organisation	Enables analysis of the logics of sustainable organisation among diverse units of observation
Data collection	Snowball sampling	Network of organisations mapped from sources emerging from interviews/secondary data. Nodes and edges define network boundaries
Data sources	(1) 35 semi-structured interviews (2) 269 documents <ul style="list-style-type: none"> • 148 internal organisational documents • 121 external documents from websites, project reports, action plans, guidelines, announcements and training literature 	Data sources used to
(1) Primary (2) Secondary		(1) Map the network using snowball sampling by identifying relationships (2) Collect data
Data analysis	(1) Thematic analysis of data sources into 1st and 2nd order codes and aggregate constructs (2) Centrality and density measures	(1) To identify the organising principles and logics of sustainable organisation (RQ1). To identify mechanisms of power within the network (RQ2, RQ3) (2) To examine network configurations affecting the power dynamics (RQ2 and RQ3)
(1) Axial coding (2) SNT		

Table 1.
Research design
summary

Phase 2. Qualitative data collection. Pilot interviews were held with four representatives of a major brand manufacturer to test and refine an interview protocol. Two rounds of interviews examined how stakeholders determine and construct institutional logics. The first round (December 2015–January 2016) was with key contacts in the chocolate network. Key contacts identified other actors engaged in SSCM and the network was mapped. Participants in the second round of interviews (July 2016–April 2017) were directors or held senior commercial roles (buying, selling and marketing) within their organisations.

A total of 35 semi-structured interviews with key decision-makers from 13 commercial and 22 non-commercial organisations were conducted, each lasting approximately an hour. Participants were primarily based in the UK and Europe, but included others from China, America and South America. Interviews outside of the UK were completed by video call or telephone. All interviews were audio-recorded and transcribed verbatim. Sustainability activities that denote ties within the institutional field were obtained from secondary sources. Secondary data are commonly used in sustainability (Meehan and Pinnington, 2021). A total

of 269 documents captured the diversity of organisational types and sustainability priorities. Table 1 outlines the data sources and research design.

The global sustainable cocoa supply chain was selected because it had prior history in SSCM, public scrutiny of sustainability principles and provided a context that was within the resources of the researcher to collect data from. Multiple data sources enabled triangulation of interpretations and to establish chains of evidence. To ensure rigour and relevance through the research process, the four evaluation criteria were adhered to (Yin, 2014), see Table 2.

Phase 3. Axial coding. The multiple data sources were transcribed and arranged systematically. All data, primary and secondary, were treated as one dataset. The dataset was coded using NVivo software against sensitising concepts in the literature relating to SSCM logics and sources of power. To capture how institutional logics shape the network, the data were analysed against business model value, stakeholder value and inter-relational activities, as outlined in Table 4 (findings section). From these themes, units of meaning were developed into first-order codes and analysed for patterns. The codes were reduced and abstracted further (Strauss and Corbin, 1998) to define and develop the structures and mechanisms in the emerging conceptual framework (Neuman, 2014), see Figure 2 in findings section. These patterns are captured as categories in second-order codes, from which aggregate constructs were theorised to describe the institutional logics of sustainable organisation and its sources of power.

Phase 4. Network measures. The dataset was exported to NodeXL analytic software to map the edges in the network using social network analysis (Rowley, 1997, 2017). The 63 nodes and their 366 edges were cross-examined, using the constructs outlined in Table 3, to understand how institutional logics are diffused across the network structure using power

Tests	Design considerations	Phase of research
Construct validity	(1) The extant literature to inform research questions and interview questions	Research design
	(2) Pilot interviews	
Internal validity	(1) Multiple sources of primary and secondary data	Data collection
	(2) Informants corroborate findings and evidence	
	(1) Establish chain of evidence	Data analysis
	(2) Data triangulation through use of multiple sources of evidence	
External validity	(1) Interviewees well informed on sustainability	Research design
	(1) Pattern matching between data in NVivo to achieve data saturation for congruence with predicted patterns in the conceptual model, without threats being found to accomplish literal and theoretical replication	Data analysis
	(2) Explanation building of sustainable organisation given multiple interpretations of sustainability	
Reliability	(3) Address rival explanations	
	(1) Augmenting study design with “how” questions to develop theoretical propositions or whether rival explanations are necessary	Research design
Reliability	(1) Scope of case study, unit of analysis and context confirmed	Research design
	(1) Use of a case study protocol	Research design
	(1) Audio recording and transcribing of interview data	Data collection
	(2) All data held electronically in NVivo for coding	
Reliability	(1) Develop case study database	Data collection
	(1) Data analysis and interpretation of findings by more than one author and who did not gather data	Data analysis

Table 2. Case study tactics for four design tests

Table 3.
SNA constructs

Construct	Definition	Measure
Node (Borgatti and Li, 2009)	An actor/entity in the network	Commercial and non-commercial stakeholders
Edge/Ties (Borgatti et al., 2018)	Relationship quality along multiple dimensions, e.g. duration and frequency	Connection activity between two nodes
Centrality (Rowley, 1997)	An actor's network position relative to others based on direct and indirect ties	The number of direct ties to other actors, interdependent access to others and control over other actors
(1) Degree centrality (Vurro et al., 2009)	The relative importance of reputational quality and informal power	Counts the number of connections a node has
(2) Closeness (Hansen et al., 2011)	Level of importance in the network	The average shortest distance between nodes, indicating a central position
(3) Betweenness (Hansen et al., 2011)	Describes how a node acts as a gatekeeper or bridge to control the flow of information	All the shortest paths to calculate the nodes' frequency, i.e. closeness, and then calculating how many times a node falls on one, therefore depicting it as a bridge between nodes. The higher the score, the higher the node's importance
(4) Eigenvector ratio (Hansen et al., 2011)	Depicts influence scores for strategically connected actors	The total number and degree of connections
Density (Lambert and Cooper, 2000)	Overall structure and connections of the network	The number of links as a ratio to the number of relationships
Clustering coefficient (Hansen et al., 2011)	A group of transitive nodes closely interrelated	The degree to which organisations tend to cluster together

mechanisms (Rowley, 1997). Axial coding identified two value co-creation activities, *collaborative* and *pre-competitive activities* that were used as ties/edges to map connections among nodes. Social network analysis explored relationship patterns and their implications (Wasserman and Faust, 1994), allowing for different levels of collectively, such as organisations, associations, clusters, industries and sectors (Borgatti et al., 2018). We analysed stakeholders' positions of influence to pursue their interests through the network (Rowley, 2017). The relational environment and organisational values were used to explain the interplay between activities that institutionalise the logics of sustainable organisation. Centrality and density illustrate the network determinants and enable analysis beyond economics-based theories (Rowley, 2017).

Findings

SNT and axial coding were used to identify institutional logics representing economic and social dimensions of sustainability. The organising principles and sources of power develop a new understanding of sustainable organisation, evident in the range of traditional and alternative archetypes, power dynamics and practices, as illustrated in our conceptual framework (Figure 2).

Organising principles of institutional logics

The organising principles of institutional logics identified are summarised and categorised in Table 4 and explained below.

Business model value

All business models identified across the 63 organisations in this study capture some aspect of sustainability, yet patterns occur. The classical business models, including the triple

Organising principles		Institutional logics		Indicative respondent quotes	
Theme	First-order codes	Second-order codes	Aggregate construct		
Business model value	Triple bottom line Creating shared value Profit for purpose B-Corp Co-operative Fairtrade Value at source Indigenous Business impacted by stakeholder Business capture value from stakeholder Align stakeholders with organisational conceptualisation Business impact on stakeholder Business creates and captures stakeholder value Consider stakeholder orientation and priorities	Classical economic theory Alternative economic theory Resistance Receptivity	Economic logic Social logic Economic logic Social logic	<p>"As a member of the World Cocoa Foundation, we share the ambition to create a sustainable and profitable cocoa economy, thereby improving the lives of cocoa producers and their families." Retailer</p> <p>"The economic part is how really where we think. We are quite different from other schemes or others who are talking about sustainability because we also feel that price in the way that prices are set and the way valuers distribute it across the supply chain is a key component to sustainability." Non-profit organisation</p> <p>"We work with thousands of suppliers, consultants and business partners around the world. We are taking steps to align what they do for us with our values and goals." Manufacturer</p> <p>"We can achieve more through other people doing the same as we do and miming as much as possible to our approaches and also us learning as well to be honest. I do not want to be totally arrogant about this. We can learn from other parties being involved as well." Retailer</p>	
Inter-relationship activities	Goal alignment Coordination and cooperation Enhanced communication and information sharing Joint development Common language, principles and goals Knowledge and information exchange Engage in workgroups, programmes and activities	Collaboration Concurrence - Pre-competitive Collaboration	Economic logic Social logic	<p>"Typically, the branded companies will have their sustainability initiatives and activities that touch farmers in origin... They're working directly with a certain number of farmers and a certain number of geographies but at the same time, they're still on the commercial side sourcing their raw materials or their semi-finished products through suppliers, right. A branded company is not typically out there sourcing beans in a completely vertically organised way. So, what that means is if they really want to reach their entire supply chain they necessarily need to carrel and co-ordinate this with all of their suppliers." Trade association</p> <p>"The context of the trade association or a sector body is that there are areas which are common to all and where it's feasible and desirable to work pre-competitively. Very often with sustainability issues, it comes into that pre-competitive area, in some way at least, because we're often all looking for the same thing. There's no point in one company reducing the climate change impact in its supply chain if all the others do not. Because that means that the sector as a whole will still be contributing, and it, therefore, means that we're not going to be helped to mitigate the problem. Therefore, we'll all be equally vulnerable in the long-term. So, there is a lot of good discussion about what are the areas where we can work collaboratively together." Manufacturer</p>	

Table 4. Organising principles themes and categories

bottom line and B-Corp models, categorise business models whose logic is founded on fitting sustainability into existing firm-level economic theory, in line with the predominant framing in the extant SCM literature. The second category captures business models including fair trade and co-operatives, whose logic is founded upon alternative, socially oriented logics, as to how the wider economy should organise and rebalance. Despite the presence of alternatives, classical economic models represented the dominant logic across the organisational field.

Inequitable value distribution is reported between upstream farmers and downstream multi-national corporations (MNC) traders, manufacturers and retailers. The interviews illustrate tensions. A manufacturer, aligned to the classical business model, describes how “we seek to integrate [sustainability] as closely as possible within our business model”, while another said: “there is a challenge in putting plans into practice given differing sustainability perspectives”. In contrast, a respondent from a non-profit organisation, aligned to the alternative business model stated, “There is no definition unless people can add value at source. Sustainability is about capturing optimal amounts of value at source. We do not talk of ‘supply chains’ in our awareness-raising work but of ‘value chains’ as it puts the focus on who is creating value and who is getting paid how much. Supply chains are about supplying big companies”. Tensions are felt as margins are squeezed upstream in commodity markets with the living wage considered particularly problematic.

Stakeholder value

Stakeholder value captures sustainability’s social imperative through attitudes to stakeholders. Two streams of discourse were identified, which we categorise as resistance and receptivity. Resistance assesses the impact of stakeholders on the business in relation to the value they can create and manifests from an economic logic. In receptivity, the business considers its impact on stakeholders. It represents the value of partnerships with commercial and non-commercial organisations and as such manifests from a social logic.

Inter-relational activities

Inter-relational activities reveal how, and when, network collaboration takes place. The data describe alignment, implementation and maintenance of inter-relational activities that develop and sustain relationships for mutual advantage. Organisations experienced in collaboration are moving beyond traditional dyadic partnerships and focussing on sectoral-level partnerships. An interesting and unexpected finding is that socially driven, non-commercial collaboration is identified, and crucially, this is *pre-competitive* collaboration. We term these activities “concurrency”. Concurrency requires high collaborative capacity. Firm-led initiatives, such as those by Unilever and Danone to scale-up the B-Corp business model to MNCs are seen, as well as sectoral partnerships such as the merger of UTZ and Rainforest Alliance to create a single sustainability standard adopted by

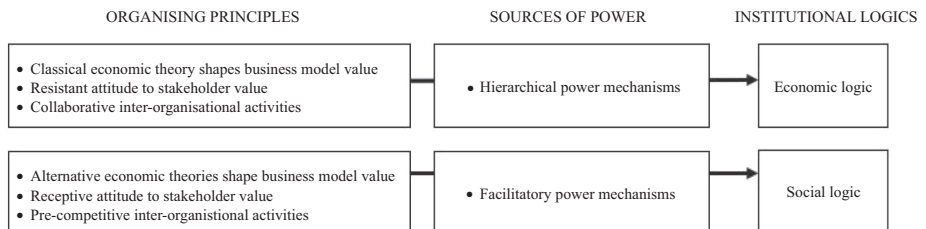


Figure 2. Conceptual framework of the socioeconomic logics of sustainable organisation

85 member companies. The leading cocoa and chocolate companies are strategically forming agreements for sustainability stewardship programs under the World Cocoa Foundation (WCF). The WCF's *Cocoa Action* scheme attempts to accelerate sustainability through ten of the largest traders and manufacturers working with governments and key stakeholders.

Sources of power

Table 5 outlines ties used as mechanisms of power by members of the network. SNA illustrates how powerful actors leverage their centralised position in social networks, through pre-competitive concurrence activities that legitimise and mainstream their expertise within the institutional field. Sophisticated social practices are observed, whereby experience and resource fitness enables dominant firms to have network influence that is more subtle, oblique and hegemonic than dyadic or directed actions. Alternative logics are marginalised

Sources of power		Institutional logics	
First-order codes	Second-order codes	Aggregate constructs	Indicative respondent quotes
(1) Power over vertical integration	Hierarchical	Economic logic	“When we are looking upstream at supplier management, because of a lot of what we’re achieving around raw materials, which is where we think the biggest impacts are, is to do with engaging our suppliers to say, “You know it is all outside our direct control. What we are looking for is progress in these areas. Increasingly, how can you help us with driving progress in these areas? And we are looking to embed these discussions into our commercial ways of doing business, our normal contracting process so that it becomes part of the way that we buy and procure raw materials. And again that becomes most effective because again it is mainstreaming it within our supplier relationships.” Manufacturer
(2) Consolidation of power in collaborative partnerships			
(3) Direct or indirect influence of supply			
(4) Economic power relative over stakeholder			
(5) Scaling up/down depending on demand			
(6) Leveraging certification			
(7) Use the market to scale			
(8) Leveraging sustainability to be market leaders			
(9) Changing the business model			
(10) Restructuring supply chains and operations			
(1) Perceived as leader	Facilitating	Social logic	“The nature of the type of companies involved is that some are leaders. . . It’s good for us to align with those leaders. We want to learn from them, but also become leaders ourselves and encourage others to get involved. It was an easy decision for me and others to make in some way. We obviously had to convince the business of why it is important, but those really big kinds of collaborative forums are the ones that we want to be involved in.” Retailer
(2) Leveraging soft power to develop relationships			
(3) Social power relative to stakeholder			
(4) Consolidation of power in pre-competitive partnerships			
(5) Business functions collaborating			
(6) Leveraging resources to incentivise			
(7) Leveraging partners to strengthen network position			

Table 5.
Sources of power
themes and categories

because less powerful organisations do not have the resources to leverage access, for example multi-stakeholder collaborative events, whereby smaller organisations were not present.

Firms develop multi-stakeholder approaches to harness sophisticated and complex relational power mechanisms. Practices frequently take the form of leadership and focus on changing mindsets and behaviours. Two types of influence approaches were displayed, which we label as hierarchical and facilitating. Practices are tempered by an organisation's attitude to stakeholders as an organising principle, which serves as a central variable in determining stakeholder relationships.

Hierarchical

Hierarchical approaches centre on economic position including scale, brokerage, purchasing power and contract terms were used by dominant, typically downstream firms, to influence supply chain orientation towards their conception of sustainability. For example, firms perceived as legitimate market leaders hold privileged central positions of influence on pre-competitive platforms, roundtable events, inter-governmental initiatives and across media. Resource and scale are used to consolidate power in clusters, such as the WCF trade association. Clusters are considered hegemonic because these communities are populated with downstream MNC manufacturers and retailers, and except for a co-operative retailer, all operate within the organising principles of classical economic theory, potentially impeding the development of alternative logics. Various structural activities drive their sustainability agenda, including mergers and acquisitions, transparency and traceability systems, resource sharing and investment, incremental and radical systemic change and organisational reorientation.

Facilitating

Facilitating approaches build relational ties through which firms aim to shift from mandate to legitimacy, accountability to trust, openness to honesty and recognition to validation. The commercial and pre-competitive collaborations revealed in the organising principles involve social practices that define, align, implement and develop a sustainability agenda. Firms use alliances through clusters and strategic communities to shape sustainability logics. Legitimacy is furthered across a wider society, as the firms' CEOs have central roles on global platforms such as DAVOS. However, these collaborations are imbalanced. Actors representing alternative organising principles, such as farmers and their representative associations, have a diminished voice as they often cannot afford access and do not have the resources to initiate or direct structural activities, are represented by a third-party NGOs, or are dependent on dominant firms. Thus, members with a peripheral position in the network structure have no means of leveraging structural mechanisms of power, limiting their influence and the voice of alternative values.

Stakeholder networks as a source of power

The inter-relational collaborative and concurrent activities rely on ties generated in the institutional field to enable the shaping of legitimating ideas and norms. The mapping, outlined in [Table 6](#), reveals highly centralised actors operating within a low-density network, characteristic of greater agency for independent behaviours, an increased ability to resist external pressure and lower levels of isomorphism of institutional logics. To overcome issues of isolation and individual behaviour, organisations are responding through collaboration and pre-competitive clusters. As a retail respondent reported: "*You've got to get that kind of thing where we can actually achieve more for businesses through this not being a competitive space and by this being a collaborative space. A lot of this is around, right we can all do one thing,*

and we know that it will cost us much more individually, and will we get better quality out of this by doing our own thing, by individually managing that? And that's a really useful question and if the answer to that is no, then the answer is very often, most usually, some kind of pre-competitive alliance or collaboration, and would be a more sensible way to approach this".

Interestingly, however, our results reveal that in this low-density network, this shift in mindset, from individual to collective action, requires resource fitness to enable increased centrality or access to clusters. A total of 49% of organisations analysed have below-average degree centrality and 62% below-average clustering coefficient. This explains why commercial farmers' associations remain isolated, as they reported limited resources to develop ties. Conacado, a union of cocoa cooperatives integrated with Fairtrade partnerships, being the only exception found in our study. In comparison, within the non-commercial cohort, four (out of nine) trade associations have below-average centrality, but are able to compensate with above-average clustering coefficients owing to their high levels of resource fitness.

To counteract the polarised power dynamics, organisations with aligned strategic priorities related to materiality impacts have created clusters. The first set of clusters occurs within collaborative partnerships but is structurally rooted in commercial organisations' direct supply chains. A critical and unanticipated result is the identification of the second set of clusters that occur *pre-competitively* through trade associations and these exhibit dense interconnections. To compensate for the increased challenge of compromising in a dense cluster, companies have kept the definition of sustainability broad with a focus on dimensional priorities rather than ethical values.

The network has a low number of connections, but their quality denotes high-density links illustrated by greater levels of graph density (36–50%). The institutionalisation of sustainability norms and practices is illustrated by the degree of concurrent interaction. Of the 366 unique connections, 129 are concurrent, of which, 66 are with trade associations. The average clustering coefficient in the network is 35%, indicating cohesion and high local transitivity. Pre-competitive collaboration institutionalises organising principles, as an MNC retailer explained, "The key message is leverage. Can we grow our leverage by joining in with others? You can find similarities, but they will apply differently. So you need the indicators, the KPIs, the measures, the language to be the same." Peripheral industries, such as retailers, leverage the betweenness and eigenvector centrality of network members to gain access to farmers to collaborate with.

The mapping identifies two significant communities. The first is upstream focused on sustainable agriculture (representing 69% of all relationships) and the security and stability of commodity supply. The second community is downstream focused on waste, carbon and energy. An indicative example is Ceflex, a consortium of European companies and associations including Amcor, Marks and Spencer (M&S), Nestlé and Unilever. Ceflex is engaged in developing a circular economy for packaging, with similar initiatives being

Metric	Average value	Maximum value	Minimum value
Number of nodes	63	–	–
Number of unique relationships	366	–	–
Density	19%	–	–
Mean degree centrality	11.629	27	1
Mean closeness centrality	0.008	0.010	0.005
Mean "betweenness" centrality	35.571	288.339	0.000
Mean eigenvector centrality	0.016	0.037	0.000
Clustering coefficient	0.354	1.000	0.000

Table 6.
Network metrics

adopted across the network by trade associations and NGOs, such as WRAP, the Carbon Trust, Institute of Grocery Distribution (IGD) and the Consumers Goods Forum (CGF). These communities enable organisations to position themselves centrally within the cluster while remaining on the periphery of the network. Examples include Tesco and M&S's participation in the WCF downstream to strategically sustain cocoa production and, upstream, IGD to tackle waste and the CGF to drive consumer change.

As an inverse measure of centrality, the network's low closeness score (0.008) suggests that partners are directly connected with high centrality. The organisations lacking centrality were retailers and trade associations, for whom cocoa was not the primary commodity or those who represented an alternative paradigm, such as Traidcraft and Proudly Made in Africa. Retailers committed to embedding sustainability, optimise clusters and place themselves in central positions within communities of strategic interest, with one retailer commenting "*Most supply chains, particularly commodity supply chains, are kind of hourglass-shaped and there's nearly always a certain point in that supply chain where there are a relatively small number of actors. We recognise that we do have a leadership role within a retail sector, and we have chosen to participate with almost every forum that you can think of*". For example, M&S has higher-than-average connections (degree centrality = 18), and while this denotes a relatively low central position in the overall network, the firm uses sophisticated connections to influence. Their higher-than-average eigenvector value (0.023) and betweenness centrality (49.46) suggests it controls flows through strategically important nodes and clusters, evidenced through their lead role in trade associations, allowing them to act as gatekeepers in collaborative and pre-competitive activities.

Across the network, 29 organisations have an above-average eigenvector score of 0.016, suggesting influential positions. As a more sophisticated representation of degree centrality, eigen centrality assumes that not all connections have equal value in terms of quantity and quality. The groups that tend to lack influence are retailers, non-agricultural trade associations and NGOs. However, there are exceptions, such as Cocoa Barometer (0.029), Solidaridad (0.037) and Oxfam (0.023).

Discussion

We contribute to the nascent area of logics research in SSCM (Nath *et al.*, 2020; Pullman *et al.*, 2018; Sayed *et al.*, 2017), by identifying the socioeconomic organising principles of sustainable organisation, their sources of power and their logics. Sustainable organisation produces alternative logics for SSCM that go beyond the traditional economic logic of SCM to transform network dynamics. Extent SSCM research builds largely on the modification of economic logic to integrate sustainability into existing business models (Carter and Rogers, 2008; Longoni and Cagliano, 2015). Our findings support prior research that suggest that the economic logic is dominant (Johnston *et al.*, 2007; Margolis and Walsh, 2003), as this is manifest within the organising principles of sustainable organisation.

Although economic logics remains dominant, we find evidence of alternative business models (Bocken *et al.*, 2014), social responsibility and an emerging logic that is receptive to diverse stakeholders (Miemczyk *et al.*, 2012; Seuring and Müller, 2008). Sustainability requires logics beyond commercial dimensions (Laasch, 2018; Schneider, 2015), and we build on prior work by revealing the critical role of collaboration with non-commercial stakeholders in seeding and diffusing alternative values. These variant logics characterise the transformative logic of sustainability ideology resulting in new forms of socioeconomic organisation and new facilitatory sources of power. By revealing the new logics of sustainable organisation, our results add further weight to the call that sustainability requires fundamental changes to traditional economic-oriented conceptions of SCM (Pagell and Shevchenko, 2014).

Scholars have long reported that efforts to “resolve” sustainability are difficult to accommodate under an economic logic (Johnston *et al.*, 2007; Longoni and Cagliano, 2015). We reveal the coexistence of logics, rooted in heterogeneous business and sustainability principles, which provide explanatory power to SSCM theory by exposing *why* it is not possible to fully integrate sustainability into SCM unless the social logic is also weighted rather than being treated as a trade-off. Yet, it is here we expose hidden tensions and potential risks from the dominant economic logic. While stakeholder engagement can advance social logics across a field (Kelling *et al.*, 2020; Longoni *et al.*, 2019; Rodríguez *et al.*, 2016), the prevailing economic framing of power asymmetries, common in business relations, create stakeholder resistance (Touboulis *et al.*, 2014). Our results confirm that economic logics are associated with stakeholder resistance and crucially, also maintain a focal company perspective, in line with the common positioning in the literature (Svensson *et al.*, 2018), rather than adopting a network view. This latter point is important, as it reinforces dyadic economic power bases and the primacy of a firm’s outcomes, rather than wider, shared, social and environmental benefits.

Our concept of receptivity emerges from a social logic and reframes sustainability priorities by considering the impacts of a business on stakeholders, rather than how a business is impacted by stakeholders. The extant literature focuses on economically oriented mechanisms for managing in multi-stakeholder environments, notably through structural alignment (Alvarez *et al.*, 2010), that can potentially lead to reductive approaches for fields with competing or multiple logics (Nath *et al.*, 2020; Pullman *et al.*, 2018; Sayed *et al.*, 2017). Our results demonstrate that misaligned core logics between socially oriented and commercial stakeholders (Longoni *et al.*, 2019) are not necessarily incompatible and they need to coexist as socioeconomic logics for sustainable organisation. Further, we posit that non-commercial stakeholders play a larger role than purely brokering issues from society to business (Rodríguez *et al.*, 2016), which can assume the fitting of social logics “into” economic logics. We extend the theoretical discourse on the value of non-commercial actors, as they have agency in shaping new and emergent logics across an institutional field. Recognising the importance of the coexistence of logics, as opposed to focussing on competing logics, may help to address the lack of integration between ethical theories and SCM (Quarshie *et al.*, 2016).

Our study highlights the importance of “concurrency” whereby groups cluster *pre-competitively* to define sustainability principles and further, to orientate the industrial network in their favour. The practice of concurrency is indicative of the need for shared responsibility and collective action, which demand the inclusion of non-commercial stakeholders. These mechanisms matter as it is in the precompetitive space where values and logics are built and legitimised, thus are antecedents of SSCM practice. Concurrency demands sophisticated inter-relational activities and social logics, and yet the broader organising principles at play are still frequently grounded in economic assumptions. This is evidenced, as *access* to these activities remains predicated on resource fitness and structural power. We contribute here to SSCM by identifying how institutional logics act as a sophisticated mechanism of power to provide a deeper understanding of the values that shape network behaviour.

The focus on institutional logics identifies the “paradigmatic core” of SSCM, which result from the evolution of organising principles across the network (Fuenfschilling and Truffer, 2014, p. 772). From this vantage point, we show that powerful actors have hegemonic potential (Johnsen *et al.*, 2020) through influencing sustainability values that are accepted as in the common interest, and the restrictive access simultaneously constrains the logics of particular stakeholders, often non-commercial parties. Through the use of SNT (Rowley, 1997, 2017) and social network analysis (Alinaghian *et al.*, 2020; Kim *et al.*, 2011; Wichmann and Kaufmann, 2016), we reveal how this is achieved by strategically positioning themselves

in collaborative and concurrent inter-organisational relationships. Thus, whilst logics can co-exist and are transformed in sustainable organisation to socioeconomic logics, they are at risk of being dominated by powerful firms, whose status in a network and its legitimacy and ability to leverage facilitatory mechanisms of power is a critical source of social power.

An important contribution from our study is recognition of the network in SSCM. While the network approach gains momentum in supply chain research (Fabbe-Costes *et al.*, 2020; Zhu *et al.*, 2018), we extend the knowledge on network power. Network mapping in the institutional context of sustainable organisation draws attention to the role of centrality and density. Within centralised positions of power, dominant actors use economic and social mechanisms. The transformation from hierarchies with economic value to networks with socio-economic value requires control of the logics across the institution. An understanding of power-based diffusion mechanisms through the lens of commercial contract, direct or indirect, is too reductive for the logics of sustainable organisation in SSCM. As with the principle of resource dependence in markets as a theoretical construct to understand commercial control, we see that the principle of social dependence in sustainable organisation is a necessary construct to fully understand power in SSCM. Therefore, the work of French and Raven (1959) that has shaped much of our discipline's understanding of dyadic power is insufficient for true network perspectives.

Similarly, stakeholder research that takes a focal firm perspective (Alvarez *et al.*, 2010; Busse *et al.*, 2017; Svensson *et al.*, 2018), while illuminating various stakeholder issues, risk obscuring other power factors at play. Our findings support emerging research that identifies the criticality of network approaches to power (Hearnshaw and Wilson, 2013; Johnsen *et al.*, 2020; Meehan and Bryde, 2015; Meqdadi *et al.*, 2019). Clusters identified across the network provide interaction opportunities and the frequent communication within these groups leads to a convergence of ideas, opinions, behaviours and language. In this sense, power is not owned by a firm but becomes embedded within the network through the legitimisation of dominant logics.

Conclusion

Our study reveals the institutional logics of sustainable organisation that are creating a paradigm shift in the institutional field of SCM. We contribute to SSCM through presenting the socio-economic logic as a new conceptual framework to understand sustainable organisation. Socio-economic logics act as a sophisticated mechanism of power. Logics align through the supply network, accounting for value beyond the economic logics of financial rationales, corporate size or market dominance. The extant literature understands the necessity of the social logic in extending our understanding of "boundaries of value" for greater responsibility stakeholders (Pagell and Wu, 2009; Seuring and Müller, 2008; Vachon and Klassen, 2008) and collaborative advantages (Gold *et al.*, 2010; Gunasekaran *et al.*, 2015; Miemczyk *et al.*, 2012). Our study contributes to this discourse by explaining the institutional impact of socio-economic logics that are co-located in both economic and social mechanisms of power.

Sustainability, dictated by an emergent social-economic logic, requires a new *modus vivendi* that demands the collaboration of multiple stakeholders. Logics have an enduring quality, as they establish unchallenged social "facts" (Ocasio *et al.*, 2015). Shared responsibility and multilateral stakeholder engagements require us to understand the emerging logics of SSCM as new mechanisms of power. The results demonstrate that sustainability needs different mechanisms of power because of the different institutional logics of SSCM.

In sustainable organisation, power is co-located – structurally and relationally – outside of contractual relationships. And yet, we draw attention to potential hegemony of concurrent

pre-competitive collaboration act, as it demonstrates the power of social relations to shape institutional logics while restricting alternative logics. Our study also highlights the importance of concurrence whereby groups cluster pre-competitively to define sustainability principles and further, to orientate the industrial network in their favour. Access to clusters is based on stakeholders' capability to exercise social and financial capital across the network and is grounded in an economic logic, creating tensions. This new concept is critical to the institutional logics of sustainable organisation, as the perspectives of multiple stakeholders, commercial and non-commercial requires consideration. Our focus on logics, as an antecedent to practice, highlights the need for all parts of the network to be more inclusive and accessible.

Implications for practice and further research

There is a normative imperative to our findings that highlights how dominant firms are using resources and sophisticated mechanisms of power across the social network to influence the institutional logics. If practitioners (and researchers) are to have an accurate understanding of how to manage supply chains sustainability then the concepts, theories and models that support this must stem from the institutional logics of sustainable organisation and not traditional SCM, which we argue is insufficient. Organisations need to pay attention to the subtler forms of power that they create and maintain within the network activities and its clusters and identify ways to enable access to non-commercial stakeholders. Alternative logics from multiple stakeholders may create tensions within the network, but suppressing them or diluting them through integration into economic logics does not remove them. Organisations should surface tensions across the network, rather than treat them only as trade-offs. In practice, we see the limitations of mediated power within the context of pre-collaborative social relations that are non-competitive by law, highlighting the potential importance of considering differentiated logics of sustainable organisation in its entirety.

The notion of tensions/trade-offs within the institutional field is alluded to in the extant literature and was raised by interviewees. We observed the dichotomy between social and economic logics through the emergence of patterns in the analysis, such as resistance versus receptivity, but as this study explored the mechanisms that shape logics, rather than practices and decisions, it has not looked at the trade-offs between social and economic logics. However, we recommend this potentially rich line of enquiry for further research, and how these may differ across different industry contexts and networks. Different empirical contexts offer opportunities to include policy and government actors into research of the institutional field. Of potential interest here could be research into the sustainable organisation of complex social-ecological supply chain systems to explore institutional logics through policy frameworks including the United Nations Social Development Goals or the planetary boundaries framework. Further research on the tensions between centrality and density and the implications of these could help us understand how socioeconomic logics are actualised in practice. Finally, we recognise a theoretical gap in the extant literature where studies are systematically bounded by economic and linear/dyadic frames. We call for critically oriented research to reframe the paradigm of SSCM and for a broader consideration of power and hegemony beyond the boundaries of contractual relationships and economic systems.

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Corresponding author

Joanne Meehan can be contacted at: Joanne.Meehan@liverpool.ac.uk