

1 Social Value, Organisational Learning, and the Sustainable Development
2 Goals in the Built Environment

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11 **Abstract**

12 Social value in the built environment refers to the social impact any organisation, project or
13 program in that industry makes to the lives of the stakeholders affected by its activities.
14 Social value is a national/ organisation level practical vehicle for realising the United Nation's
15 Sustainable Development Goals (SDGs). It is particularly relevant in the context of the
16 continued increase in the global development of the built environment through construction
17 and infrastructure projects involving many different stakeholders. We examine clients',
18 consultant, local authority, and contractors' social value organisational learning journeys and
19 reveal how they have transformed their systems towards more sustainable production. We
20 also show how their efforts collectively align to achieve social value and thus realise the
21 SDGs beyond what any individual project or initiative would be able to deliver alone.

22 We present a transformative case study of social value in practice, which has a partnership
23 model at its heart, and the potential to inform future methodologies for business and
24 community engagement to improve social outcomes. We demonstrate the considerable
25 organisational learning effort that is made with the aim to achieve a variety of SDGs through
26 a value-based approach to business and interorganisational relations. In our work, it is the
27 contractors who play a central role in bringing together the different influences and managing
28 agency-structure interplay within this social practice. The partnership approach explored in
29 this paper offers a way to ensure more efficient use of resources in the hugely important
30 development of the built environment.

31

32 **Key words:**

33 social value, organisational learning, partnership, nexus, built environment

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36 1. Introduction

37 The built environment sector has a major impact on the lives of people, the prosperity of
38 businesses, and the resilience, health, and well-being of communities through planning,
39 design, construction and management of urban environments, buildings, and infrastructure.
40 Social value in the built environment refers to the social impact that any organisation, project
41 or programme in that sector makes to the lives of people and communities that are affected
42 by its activities (Raideen et al, 2019). Research on social value in the built environment is
43 increasing in momentum and important for the development of organisational practice in this
44 space. As it is an emerging concept, practice varies widely. There are exemplars of good
45 practice (see for example: Supply Chain Sustainability School, 2017), but on the whole
46 relatively few have embraced this new currency in procurement or construction practice to
47 full potential (Loosemore, 2016). Work in the built environment invariably involves many
48 different stakeholders, such as clients, design and planning professionals, engineering and
49 construction professionals and workers, trades, suppliers, facilities management providers
50 and their personnel, and community groups and their members. We examine different
51 stakeholders' social value organisational learning journeys, and we show how their activities
52 and interventions over time have aligned and collectively achieve social value. Our research
53 question therefore asks *how different stakeholders' organisational learning journeys on*
54 *social value aid the achievement of the SDGs.*

55 1.1. Social value and the Sustainable Development Goals (SDGs)

56 Social value is a national/ organisation level practical vehicle for realising the United Nation's
57 Sustainable Development Goals (SDGs) (Raideen et al, 2019: xviii). The SDGs seek to
58 address the world's increasingly urgent environmental, political, and economic challenges.
59 There are 17 SDGs and 169 targets in total, meaning each goal includes 8-12 targets.
60 Launched in 2015 as part of the 2030 Agenda for Sustainable Development, the SDGs can
61 be considered aspiration statements (United Nations, 2015). They evolved to replace the
62 Millennium Development Goals, which since 2000 had focused on reducing poverty, hunger,
63 child mortality and deadly diseases, whilst growing access to water and free primary
64 education to all children. Adopted by 193 countries, the SDGs seek to guide sustainable
65 development to take account of people, planet, prosperity, peace and partnership (United
66 Nations, 2015).

67 In terms of progress towards meeting the SDGS, all 166 countries included in the 2020 SDG
68 Index have made progress, with South and East Asian countries having made the most
69 progress since 2015 (Sachs et al, 2020). The top five SDGs associated with the most 'good
70 practices' are 17: Partnerships for Goals, 4: Quality Education, 11: Sustainable Cities and
71 Communities, 8: Decent Work and Economic Growth, and 1: No Poverty (United Nations,
72 2020). Covid-19 has profoundly impacted progress towards meeting all SDGs, with a
73 particularly negative impact on poverty (SDG 1), food security (SDG 2), health (SDG 3), the
74 economy (SDG 8), and multilateralism (SDG 17) (ibid).

75 From an organisational perspective, a mixed picture emerges. Gunzën-Jensen et al (2020)
76 focused their research on social entrepreneurs and found they had strong reservations
77 about the SDGs. However, research exploring sustainable business practices and financial
78 performance in pre- and post-SDG adoption periods found that the SDGs are well received
79 by organisations in general, who tended to prioritise the social and environmental
80 dimensions (Muhmad and Muhamad, 2020). Moreover, a more positive relationship was
81 reported between sustainability practices and financial performance in post-SDG adoption
82 (ibid).

84 **1.2. SDGs and the built environment**

85 We build on existing research on the SDGs in the built environment. Globally, the sector
 86 accounted for 39% of energy and process-related carbon dioxide (CO₂) emissions and 36%
 87 of final energy use in 2018, with 11% being a direct consequence of manufacturing building
 88 materials and products (Global ABC, 2019). The importance of the built environment in
 89 meeting the SDGs is clear when one considers that 44% of the 169 targets, across all SDGs,
 90 are dependent on construction and real estate activities (Goubran, 2019).

91 The global population is expected to rise from 7.7 billion in 2019 to 9.7 billion in 2050, with
 92 an associated doubling in the number of people who live in urban areas to 70% of the
 93 population (United Nations, 2019). The population increase is expected to be accompanied
 94 by an 80% rise in energy use (OECD, 2012) as well as 3.9 billion people facing water-
 95 insecurity (Guppy and Anderson, 2017). The built environment has a central role to play in
 96 sustainably meeting this expected growth through the planning, design, construction and
 97 management of urban environments, buildings, and infrastructure. For Opoku (2019) the
 98 construction industry can help influence the realisation of the SDGs through sustainable
 99 practices driven by policy and regulatory frameworks. However, for Russell et al (2018) the
 100 complex nature of construction supply chains means that the promotion of shared values
 101 and transparent third-party oversight are more effective ways of driving sustainable
 102 consumption and production than control mechanisms such as legislation and regulation.
 103 Whichever approach, or mixture of approaches is adopted, it requires the involvement of a
 104 range of actors.

105 We focus on the ability to create significant impact in the huge global construction and
 106 infrastructure market, which is forecast to increase output from US\$10.8 trillion in 2017 to
 107 US\$12.9 trillion by 2022 (Global Data, 2018). Social value offers a way to meet all 17 of the
 108 SDGs, at least indirectly, and ideally it is the nexus (see Bleischwitz et al, 2018) of an
 109 integrated approach that delivers on the SDGs in a resource efficient manner. For the
 110 purposes of brevity, we table the SDGs and selected target examples relevant to the built
 111 environment below.

112 Table 1. SDGs (United Nations, 2015) and target examples relevant to the built environment

<i>Sustainable Development Goals</i>	<i>Target examples relevant to the built environment</i>
1. No poverty <i>End poverty in all its forms everywhere</i>	1.2. By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions
2. Zero hunger <i>End hunger, achieve food security and improved nutrition, and promote sustainable agriculture</i>	2.1. By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round
3. Good health and well-being <i>Ensure healthy lives and promote well-being for all at all ages</i>	3.5. Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol
4. Quality education <i>Ensure inclusive and equitable quality education and promote lifelong learning for all</i>	4.4. By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship

<p>5. Gender equality <i>Achieve gender equality and empower all women and girls</i></p>	5.1. End all forms of discrimination against all women and girls everywhere
<p>6. Clean water and sanitation <i>Ensure availability and sustainable management of water and sanitation for all</i></p>	6.4. By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity
<p>7. Affordable and clean energy <i>Ensure access to affordable, reliable, sustainable, and clean energy for all</i></p>	7.3. By 2030, double the global rate of improvement in energy efficiency
<p>8. Decent work and economic growth <i>Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all</i></p>	8.6. By 2020, substantially reduce the proportion of youth not in employment, education or training
<p>9. Industry, innovation and infrastructure <i>Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation</i></p>	9.4. By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities
<p>10. Reduced inequalities <i>Reduce inequality within and among countries</i></p>	10.2. By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status
<p>11. Sustainable cities and communities <i>Make cities and human settlements inclusive, safe, resilient and sustainable</i></p>	11.3. By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries
<p>12. Responsible consumption and production <i>Ensure sustainable consumption and production patterns</i></p>	12.7. Promote public procurement practices that are sustainable, in accordance with national policies and priorities
<p>13. Climate action <i>Take urgent action to combat climate change and its impacts</i></p>	13.3. Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning
<p>14. Life below water <i>Conserve and sustainably use the oceans, seas and marine resources for sustainable development</i></p>	14.1. By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution
<p>15. Life on land <i>Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and stop and reverse land degradation and halt biodiversity loss</i></p>	15.9. By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts
<p>16. Peace, justice and strong institutions <i>Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels</i></p>	16.7: Ensure responsive, inclusive, participatory and representative decision-making at all levels

<p>17. Partnerships for the goals <i>Strengthen the means of implementation and revitalize the global partnership for sustainable development</i></p>	<p>17.17. Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships</p>
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114 As work in the built environment crosscuts across all the SDGs, the sector plays a
 115 fundamental role in creating positive change (Opoku, 2016). However, even a succinct
 116 summary of the 17 SDGs and carefully prioritised target examples (as presented in Table
 117 1) can be met with the critique that the ambitions are overly generic, broad in scope, and
 118 too high level to offer a meaningful guide for action for individuals or organisations. Hence,
 119 whilst most of the SDGs feature in our findings, our discussion hereon primarily relates to
 120 SDGs 9, 10, 11, 12, 16 and 17 because these are present at the centre of good practice on
 121 social value and organisational learning in our data.

122 **1.3. Organisational learning and the SDGs in the built environment**

123 Learning at an individual level is about a long-term change in the knowledge, skill, attitudes,
 124 or values which may lead to a person having increased potential to perform, develop and
 125 grow (Smith and Sadler-Smith, 2006). Organisational learning refers to the collective
 126 processes and culture of many individuals learning in a work context, knowledge
 127 management and continuous improvement (Wang and Ahmed, 2003). It is more than the
 128 sum of the individuals' learning; it is about a system of change in organisational strategy,
 129 policy, and practice, where organisational culture institutionalises transformation rather than
 130 the status quo. Organisations that continually facilitate the learning of their members,
 131 continually transform themselves in harmony with the prevailing operating context, nurture
 132 new and expansive patterns of thinking, and learn how to learn (so called learning
 133 organisations, cf. Senge, 1990; Pedler et al, 1991) and benefit from an advanced and
 134 sophisticated approach to organisational learning. Research suggests that some
 135 construction organisations take the form of a chaordic learning organisation (Raiden and
 136 Dainty, 2006). The central characteristics of such an enterprise are discontinuous growth,
 137 organisational consciousness, connectivity, flexibility, continuous transformation, and self-
 138 organisation (van Eijnatten, 2004). Despite its attractive qualities, organisational learning
 139 has received relatively little attention within research in the built environment or at an applied
 140 level in company practices (Loosemore et al, 2003: 255; Abdel-Wahab et al, 2009;
 141 Chiponde, 2020).

142 It is often external forces that are driving individual and organisational learning and practice
 143 on social value at present (Raiden et al, 2019: 10). Organisations in all sectors, including
 144 the built environment, are converging in their practices because of coercive and mimetic
 145 isomorphism; that is, pressure from legislative frameworks and societal expectations, and
 146 modelling or imitating other organisations because this is believed to be beneficial or
 147 necessary. However, some external forces, such as the SDGs, have not yet realised their
 148 full potential to engender change. This is in part because of the tendency for the SDGs to
 149 be considered together, as a set, which can overwhelm well-intended organisational learning
 150 and development interventions. This is especially so where organisational learning is simply
 151 equated to the sum of individual learning within organisations. Whilst this person-centred
 152 view of learning can be explicitly linked to some of the SDGs, such as SDG 4: quality
 153 education (promoting lifelong learning for all), it can be difficult to see how individual learning
 154 might contribute towards many other important SDGs, for example SDG 17: partnerships
 155 for the goals (strengthen the means of implementation and revitalize the global partnership

156 for sustainable development). The latter is essential and urgent for sustainable, inclusive,
157 and resilient development (Stibbe and Prescott, 2020: 6).

158 Such concern echoes more general and longstanding critique and discussion about
159 conceptual polarisation and unit/ process specificity in organisational learning (see for
160 example Dunphy et al, 1997; Ricciardi et al, 2020). Instead of system-level knowledge
161 management and organisational learning focused on achieving the common good, extant
162 literature tends to offer a path from organisational learning to organisational performance.
163 We forward a broader perspective which suggests that organisational learning includes the
164 notions of process, i.e. learning and knowing, and the notion of the outcomes of those
165 processes, on multiple levels (after Dunphy et al, 1997: 235; Ortenblad, 2001: 129; Ricciardi
166 et al, 2020: 7). Such a view is essential for organisations in the built environment to better
167 manage the journey towards a sustainable change (Chan et al, 2004; Opoku and Fortune,
168 2011).

169 We argue that organisational learning, as a construct which supports learning within
170 organisations, must move further forward on the individual-collective continuum and be
171 understood at the level of a system (be it a process, supply-chain, or industry) if we are to
172 reach systemic advances towards achieving the SDGs and creating social value. Learning
173 must occur between organisations too, e.g. within the long construction supply-chain, and
174 collectively different organisations can realise the most significant progress when they co-
175 create social value together (Miner and Mezias, 1996; Raiden et al, 2019).

176 Connecting social value, organisational learning, and the SDGs, shows promise as a means
177 to realise the wider social, economic and environmental impact in a way that allows all
178 organisations to benefit from efficient resource management. We argue that each
179 stakeholder can then target their resource utilisation and organisational learning to meet
180 their core business purpose and goals, and at the same time make a maximum contribution
181 to the global collective project. We use social practice theory to frame our discussion and
182 focus attention on *social value practice*.

183

184 2. Research approach and method

185 The 'practice approach' (Schatzki et al., 2001) and social practice theory (see for example
186 Schatzki, 1996; Reckwitz, 2002; Hargreaves, 2011; Shove et al, 2012) offer an
187 advantageous theoretical framing for research where connections between context, social
188 activity and change are of interest. Literature in this space is aligned along the principles
189 and philosophical foundations "*tied to an interest in the 'everyday' and 'life-world'*" (Reckwitz,
190 2002: 244). The practice itself, rather than the individuals who perform them or the social
191 structures that surround them are the core unit of analysis (Hargreaves, 2011: 82). Social
192 situations are influenced by individual choices and actions; yet they are shaped by broader
193 structures and meaning (after Giddens, 1984; Reckwitz, 2002; Shove et al., 2012: 11-12). It
194 is not the pursuit of individual interest, nor the outcome of external forces alone that orders
195 everyday life, but rather an ongoing play and duality of agency and structure. Thus, social
196 practice theory helps us bring together different narratives and experiences of social value
197 and it offers a holistic yet grounded framework for analysis of how social value as practice
198 emerges and evolves. Whilst this approach may restrict our ability to make universal
199 generalizations, an issue that would be seen as a significant disadvantage in the
200 conventional positivistic paradigm (Hargreaves, 2011: 84), it leads to richer and more subtle
201 accounts of action and embeddedness in empirical analysis (Reckwitz, 2002: 259).

202 We present insights from a range of key stakeholders, who have all recently worked through
203 social value related transformation processes in the built environment: two clients, a
204 consultant, a city council (local authority), and two contractors. Since our goal was not to
205 generalize to a population, but instead to obtain insights into the phenomenon, we
206 purposefully selected individuals and organisations that helped us maximize understanding
207 of social value and organisational learning (Onwuegbuzie and Leech, 2007: 111). Thus, we
208 used criterion sampling to identify key informants who (i) worked in the built environment
209 sector, (ii) are explicitly committed to social value, (iii) were aware of the SDGs, and (iv) had
210 managed or were currently engaged with organisational learning. We describe their journeys
211 using three sources of data: (i) extracts from phenomenological conversational interviews
212 (after Given, 2008; Berner-Rodoreda et al., 2018), which were conducted face-to-face and
213 via video and telephone during winter and spring 2019-2020; (ii) written research
214 correspondence; and (iii) published material about the organisations.

215 The research process was a developmental journey to co-create and refine our collective
216 understanding of social value, organisational learning, and the SDGs through continuous
217 critical reflection. There were several contact points with the different stakeholders, and we
218 worked through a circular process that consisted of the following:

- 219 1. Initial contact, during which the participants' interest to take part in the research was
220 sought and confirmed, and we verified our sampling criterion had been met.
- 221 2. First interviews: all respondents were interviewed at least once. Client 1 interview
222 was with the Business Development Director, and Client 2 interview with the Head of
223 Procurement. From the Consultant organisation we interviewed the Founding
224 Partner. The City Council Senior Principal Urban Design and Conservation Officer
225 was interviewed within the Local Authority. Contractor 1 interviews were with the
226 Regional Commercial Manager, Senior Commercial Manager, and the Community
227 and Regeneration Advisor; and Contractor 2 interview was with a Senior
228 Sustainability Executive.
- 229 3. Accessing published materials, to source detailed information about the organisation
230 and follow up links provided by the respondents during the initial contacts and/ or first
231 interviews. We accessed all the organisations' websites at least once.
- 232 4. Reflective Practice Reports: all participants created a reflective report outlining the
233 development and application of their social value activities including the challenges,
234 successes, and key learning points.
- 235 5. Written correspondence, to share the research team's interpretation and presentation
236 of the respondent's accounts and verify they were accurate. Many respondents
237 provided additional information and clarification at this stage, and so we followed this
238 up by accessing further published materials and/ or more interviews.
- 239 6. Accessing published materials, including Client 1 business blogs and a business
240 report; Client 2 local news article¹; Consultant business reports; Local Authority
241 business process chart, strategy documents, organograms, ward and project-specific
242 data; Contractor 1 project-specific social value policies and procedures, and key
243 performance indicators; and, Contractor 2 social value policy documents, various
244 organisation and project-specific key performance indicators, blogs and company
245 reports.

246 7. Subsequent interviews: the Client 1 Business Development Director, the Founding
247 Partner of the Consultancy organisation, and the Local Authority Senior Principal
248 Urban Design and Conservation Officer were all interviewed three times. Contractor
249 1 Senior Commercial Manager was interviewed twice, and the Community and
250 Regeneration Advisor was interviewed four times. Contractor 2 Senior Sustainability
251 Executive was interviewed twice.

252 8. Further written correspondence: to verify the interpretations and presentation were
253 accurate.

254 Throughout the interviews and written correspondence, while we gained information for
255 research purposes, the research respondents reported their ongoing organisational learning
256 and change: our research process helped develop their understanding and social value
257 practice. As we shared information amongst the different stakeholders, they were able to
258 gain insights and an appreciation of social value from different perspectives and use that to
259 enhance organisational learning. In this way, the research process and organisational
260 practice informed one another and facilitated an approach to action research and
261 organisational learning whereby we unearth and share data (input), learn from the data and
262 take action (transformation), and observe changes in perspectives and behaviour (output)
263 (Coghlan, 2011). Action research is one of the distinctive features of organisational
264 development and learning (French and Bell, 1999; Wang and Ahmed, 2003), and in its core
265 is the powerful notion that human systems can only be understood and changed if they
266 involve the members of the system in the inquiry process itself (Coghlan, 2011).

267

268 3. Findings and discussion

269 We describe each of the stakeholders' organisational learning journeys on social value in
270 turn, before discussing how they align with the SDGs.

271 3.1. Clients

272 We connected with two large Housing Associations in England; one with nearly 6,000 homes
273 and another with 21,000 homes, and both with an extensive portfolio of health, care and
274 employment support services delivered to customers who don't live in their homes.
275 Wellbeing is core to their business purpose.

276 A critical journey of social value-focused organisational development for both organisations
277 has centred around achieving united commitment to social value and focusing on the quality
278 of the relationships between the employees and customers. Our research respondents
279 report that it is imperative that they elicit every ounce of value out of their capital projects,
280 through prioritising social value, as the projects consume a mass of resources and are likely
281 to be in use for the next 50-100 years, or longer.

282 The client with nearly 6,000 homes derived their initial steer from a Commission for
283 Architecture and the Built Environment (CABE) guide on commissioning excellent capital
284 projects for public bodies and community organisations (CABE, 2002). In particular, a note
285 to suggest that 'clients should spend enough time at the right time in a project' had a strong
286 influence on how they now commission projects. The team have learned that to achieve a
287 successful project they need to take time on the brief, select the right design team, develop
288 the brief with that team, review and critique the proposals at every stage, and enshrine the
289 design thinking in the ongoing management and maintenance of the project.

290 The client with 21,000 homes has employed a dedicated person to champion social value,
291 and they have developed awareness-raising communications and training programmes to
292 increase organisational capability in this area. Showcasing achievements has worked well
293 in engendering commitment to considering and creating social value. More recently this
294 client has also articulated social value within their corporate plan and included it as one of
295 the key business objectives. Their activity now focuses on 'building' three-fold: building
296 homes; building people, skills, and confidence; and building communities. This all starts with
297 developing an in-depth understanding of the communities within which they operate.

298 Both clients emphasise that multiple stakeholders' input is essential internally in two ways:
299 top down and bottom up internally, and externally with partner institutions like universities
300 and their students, suppliers, and consultants. Sometimes people and organisations with
301 specialist interests are required. The client with nearly 6,000 homes reports one building
302 project involving a selection of people with varying religious beliefs who were consulted
303 regarding a prayer room, and a panel of disability and inclusion specialists involved in
304 considerations of how to best ensure the building could deliver on equality of opportunity
305 and diversity. An inspirational design team was central to translating the client brief into a
306 short document that showcased their commitment to equality and diversity, and
307 sustainability. The project architect provided leadership in regular team meetings, where
308 creative tensions, different perspectives and new relationships in the team kept the thinking
309 fresh and eventually delivered a great result. As some of the members in the professional
310 team had not worked together before, there were different expectations around, for example,
311 the level of detail in the contract documents and specification of materials. Discussions to
312 resolve such issues took time.

313 The client with 21,000 homes reported that translating their social value requirements and
314 what they mean for different suppliers and other project partners was one of their greatest
315 challenges yet proved a cornerstone to effective delivery of social value in practice.
316 Supporting the supply-chain in co-creating social value and specifically connecting with
317 small businesses locally is important to continuing and successfully delivering the maximum
318 impact.

319 The two clients emphasise the interconnectedness of their own social value learning journey
320 with those of other stakeholders, and as such SDGs 12 Responsible consumption and
321 production, and 17 Partnerships for the goals, take a centre stage in their contributions. They
322 also actively seek to enhance equality of opportunity. The other SDGs prominent in the
323 clients' accounts are 5 Gender equality, 9 Industry, innovation and infrastructure, 10
324 Reduced inequalities, 11 Sustainable cities and communities, and 16 Peace, justice and
325 strong institutions.

326 Promoting public procurement practices that are sustainable (target 12.7) and encouraging
327 and promoting effective public, public-private and civil society partnerships, building on the
328 experience and resourcing strategies of partnerships (17.17) are the most prominent means
329 for them to create social value. This partnership approach is also beneficial for achieving
330 the Clients' business goals and enhancing the quality of the relationships between the
331 organisation, its suppliers, employees, and customers. Both Clients were aware of social
332 value and the SDGs and embraced the concepts in their organisational value statements.

333 3.2. Consultant

334 The consultant view was provided by a Midlands based multi-disciplinary construction
335 consultancy that operates nationwide in the UK. They work on community, public sector,

336 socio-economic, and people-focussed regeneration programmes with social value at their
337 core.

338 The consultants are keen to give back to the communities in which they serve, and they
339 seek to continually develop to and be responsive to changing contexts (e.g. new legislative
340 measures such as the Social Value Act) and drive innovation in sustainability. Education
341 and skills training are central to their approach. They deliver pro bono lectures, seminars,
342 training, and workshops on a wide range of built environment topics to university students,
343 industry practitioners, local people, community groups and the third sector. Their work
344 extends to include work experience to school children, apprenticeships, sponsored
345 education to masters level, and supporting the Prince's Regeneration Trust 'BRICK' heritage
346 education programme. The multiplier effect of local expenditure drives the consulting
347 organisation to require their contractors to use local supply chains, guarantee that an agreed
348 percentage of site labour is sourced locally, and provide training programmes and
349 apprenticeships for adults and young people. The company itself is also committed to:

- 350 • Employing local staff - all equity partners live and work in the local community and they
351 generate jobs for people living in the local area.
- 352 • Recruiting young people direct from local education providers in order to develop and
353 retain core skills in the local community and providing personalised training throughout
354 their careers.

355 More specific examples of the consultants' social value initiatives include:

- 356 • Securing funding to help a local Parish Council develop a Parish Plan that in turn
357 guided a District Council Local Plan.
- 358 • Advising District Councils on custom and self-building throughout North Derbyshire and
359 supporting a local school to secure £7,500 to create an allotment-style school garden.

360 In terms of 'the environment' the consultants have combined their commitment to minimising
361 the effect of their operations on the environment with a recognition that this can make sound
362 commercial sense to all parties. Specifics actions include:

- 363 • Leading sustainability reviews for professional project teams that promote client
364 awareness of reduced energy consumption in the construction and operation of
365 buildings.
- 366 • Delivery of Building Research Establishment Environmental Assessment Method
367 (BREEAM), which assesses, rates, and certifies the sustainability of buildings.
- 368 • Promotion of electronic tendering on all projects.
- 369 • Reduced travel through homeworking, video conferencing and maintenance to
370 minimise harmful vehicular emissions.
- 371 • Built-estate energy efficiency and energy saving including consolidated stationary
372 orders, continual reduction of utility use including, low energy lighting, high efficiency
373 boilers, improved insulation, use of renewable energy suppliers and reduced paper
374 use.

375 The consultant is focused on industry, innovation and the environment. SDGs 9 Industry,
376 innovation and infrastructure, 11 Sustainable cities and communities, 12 Responsible
377 consumption and production, 13 Climate action, and 17 Partnerships for the goals are all
378 areas where the consultant is making considerable advances towards achieving the SDGs.
379 Other SDGs prominent in the consultant's account are 4 Quality education, 7 Affordable and

380 clean energy, 8 Decent work and economic growth, 10 Reduced inequalities, and 16 Peace,
381 justice and strong institutions.

382 Upgrading infrastructure and retrofit industries to make them sustainable, with increased
383 resource-use efficiency and greater adoption of clean and environmentally sound
384 technologies and industrial processes (target 9.4) is central to the consultant's social value
385 interventions; both internally and in managing their supply-chain. This works hand in hand
386 with the aim to enhance inclusive and sustainable urbanization and capacity for
387 participatory, integrated and sustainable human settlement planning and management in all
388 countries (target 11.3) and promoting public procurement practices that are sustainable
389 (target 12.7). Their impact on the environment is recognised and actively considered in the
390 way the business is operated and how they advise their clients and they take urgent action
391 to combat climate change and its impacts via education, awareness-raising and improved
392 human and institutional capacity on climate change mitigation, adaptation, impact reduction
393 and early warning (target 13.3).

394 The strong value base that drives the consultancy organisation's approach to social value
395 supports achievements towards ensuring responsive, inclusive, participatory and
396 representative decision-making at all levels (target 16.7) and encouraging and promoting
397 effective public, public-private and civil society partnerships, building on the experience and
398 resourcing strategies of partnerships (target 17.17). The Founding Partner is conceptually
399 fluent, and the SDGs are central to the organisation's mission, vision, and practice; they are
400 committed to creating a sustainable future through the built environment. This is one of their
401 unique selling points which helps to position and differentiate them in the marketplace.

402 3.3. Local Authority

403 The view of the City Council Senior Principal Urban Design and Conservation Officer that
404 we connected with is that social variables of place are not considered fully in the industry.
405 Despite an increasing interest in environmental issues, there is a strong bias towards
406 economic factors in the UK. The National Planning Policy Framework (Department for
407 Communities and Local Government, 2012) sought to reform planning and initiate a period
408 of increased neighbourhood engagement and governance through the introduction of
409 Neighbourhood Plans, Local Development Orders and Local Listing. However, the majority
410 of changes were optional and underprivileged communities often found themselves lacking
411 the skills and resources to deliver owing to the technical complexities of the British planning
412 system.

413 Local government is responsible for delivering community empowerment through the
414 planning system at two core levels:

- 415 a. incorporating social structure analysis as part of the baseline studies for policy
416 development;
- 417 b. delivering continuous engagement strategies that focus on targeting social variables
418 through the process itself.

419 To help meet critical social targets and support a local ambition to become carbon neutral,
420 the City Council where our research participant works is keen to deliver high quality socially
421 valuable developments by focusing on two main strands:

- 422 • social resilience – resolving problems and creating wealth through the communities'
423 capacity to work together

- 424 • social capital – social norms, mutual trust, and the capacity of communities to form
425 relationships and networks.

426 In order to achieve this, a process of internal and external transformation was recently
427 initiated which requires a cultural shift and cross-sector engagement and education to
428 change attitudes and behaviours. Communities have been involved in shaping new design
429 guidance through a process of empowerment that gave voice to minorities and groups that
430 were previously excluded from policy development.

431 In contrast to the clients and consultant who have more specifically focused their social value
432 and organisational development efforts, the work of the local authority is quite evenly spread
433 across meeting all but one of the SDGs. SDGs 10 Reduced inequalities, 11 Sustainable
434 cities and communities, 16 Peace, justice and strong institutions, and 17 Partnerships for
435 the goals are central to the local authority. It is clear however that SDGs 1 No poverty, 3
436 Good health and well-being, 5 Gender equality, and 8 Decent work and economic growth
437 also feature high on their agenda. SDGs 2 Zero hunger, 4 Quality education, 6 Clean water
438 and sanitation, 7 Affordable and clean energy, 9 Industry, innovation and infrastructure, 12
439 Responsible consumption and production, 13 Climate action, and 15 Life on land are
440 considered. Given that the local authority is located within a landlocked region, it is not
441 surprising that the SDG 14 Life below water is the only SDGs that is not visible in their plans.

442 Empowering and promoting the social, economic, and political inclusion of all, irrespective
443 of age, sex, disability, race, ethnicity, origin, religion or economic or other status has been
444 at the heart of the change programme on carbon management (target 10.2). Strengthening
445 of institutional, systemic, and individual capacity-building by enhancing inclusive and
446 sustainable urbanization and participatory, integrated, and sustainable human settlement
447 planning and management (target 11.3) is a clear focus and a key area of responsibility for
448 the local authority, driven by national policy framework. Ensuring responsive, inclusive,
449 participatory and representative decision-making (target 16.7) and encouraging and
450 promoting effective public, public-private and civil society partnerships, building on the
451 experience and resourcing strategies of partnerships (target 17.17) similarly feature at the
452 heart of the Council's plans and activities, evident in the form of cross-sector engagement.
453 This cross-sector approach and the Council's priority areas align closely with the United
454 Nation's identified areas of good practice (highlighted earlier in section 1.1), and also help
455 improve quality of life and build a new form of clean growth for the local economy.

456 3.4. Contractors

457 Construction contracting businesses provide a range of services across a range of sectors
458 for a range of different clients spending widely different amounts of money, many of whom
459 are inexperienced and will infrequently use construction services. The clients will also have
460 widely different levels of knowledge and expectations regarding social value, and
461 themselves serve a range of stakeholders, each with differing and often competing needs.
462 The ability to respond to such diverse social value needs provides contractors with a distinct
463 challenge.

464 We explored how two large UK contractors have responded to this challenge and developed
465 their own organisational approaches to creating social impact through the use of
466 assessment and measurement. Four important themes arise from our contact with the
467 contractors: (i) start by understanding what creates impact, (ii) understanding the contractor,
468 (iii) understanding the client, and (iv) understanding the supply chain.

469 3.4.1. Start by understanding what creates impact

470 Consideration of what is important to the contractors, their clients, and communities they
471 serve, and their supply chain is key and requires the consistent use of assessment and
472 measurement tools. One contractor reports that to understand what is important requires an
473 understanding of what activities have created impact by reviewing previous performance.
474 There are a range of measurement and assessment methods that exist (albeit TOMs are
475 proving increasingly popular for a range of clients) and whichever methods are selected,
476 they must be applied consistently over a range of projects.

477 Considering what value has been created historically creates a picture of what has been
478 achieved so far and crucially identifies what is not working – there may have been a focus
479 on activities with a low socio-economic value and as such future interventions will be better
480 focused on high impact activities.

481 3.4.2. Understanding the contractor

482 Our participants stress that for them, despite assessment and measurement being so
483 important, social value is far from simply being ‘a numbers game’. Rather, as one participant
484 explained: *“It comes from the heart and social purpose is in our DNA”*. Indeed, they state
485 that creating positive social impact has been at the centre their businesses for years, long
486 before they began referring to it as social value. Joined-up thinking to reap the benefits of
487 social value at programme level is evident in the Transforming Communities initiative, where
488 public authorities and registered providers can leverage construction and housing repair
489 contracts to deliver additional social value to local communities and various key performance
490 indicators (KPIs). Building on the important ‘people’ aspect, they are increasingly integrating
491 social value in business processes to further incorporate it into their businesses. Making a
492 difference where the clients want them to is crucially important, as is being able to create
493 social impact where this is not driven by the client. In this way, the contractors’ social value
494 orientation often drives the process of creating social value.

495 3.4.3. Understanding the client

496 Whilst many clients are becoming more adept at creating social value, many do not know
497 how. This is where the contractors are able to help them understand what is important to
498 the communities they serve and also what is important to the contractors, which extends
499 over all their projects.

500 The contractors we interviewed now develop bespoke social value plans based on research
501 that draws on local authority growth plans and engaging with local community organisations.
502 This approach allows them to make lasting impacts. Moreover, they state that there is an
503 increasing need to redefine what is meant by community and continue to develop ways to
504 really understand what is needed and evaluate what has been delivered, such as through a
505 recognised social value standard.

506 3.4.4. Understanding the supply chain

507 The construction contracting model places the contractor at the heart of a network of supply
508 chains that galvanise to meet specific client needs. As such, contractors’ ability to create
509 social value throughout their supply chain holds vast potential. To provide some context, our
510 research participants’ supply chains extend to thousands of organisations providing
511 products, goods and services across the wide variety of specialised sectors they service,
512 and includes sub-contractors and their sub-contractors who, in turn, each work for a variety

513 of different contractors. Creating and measuring impact represents a significant organisation
514 learning project that starts with honesty. Manipulating key metrics for short-term gain will
515 diminish the ability to improve. Understanding what is important to the supply chain and what
516 drives them is essential as is supporting organisations to develop and grow. Specific targets
517 to continually increase expenditure with social enterprises and Modern Slavery Act training
518 for their most important supply chain partner directors are examples of specific interventions.
519 Similarly, ensuring the supply chain records the social value they create allow whole project
520 social value to be captured and communicated.

521 Positively impacting young people lays at the centre of their approach. This serves both
522 social and economic needs as the construction industry faces a looming skills shortage
523 owing to an ageing workforce and failure to attract new entrants. However, extending reach
524 to include other groups facing issues, older people, and ex-offenders/care-leavers, is also
525 important. At core, there is a focus on where people start their journey, not just where they
526 end up. A systemic approach to training, in the form of an academy which develops skills in-
527 house to meet organisational needs, was set up by one of the Contractors to facilitate
528 learning.

529 The contractors meet a wide range of SDGs directly (4 Quality education, 8 Decent work
530 and economic growth, 9 Industry, innovation and infrastructure, 10 Reduced inequalities, 12
531 Responsible consumption and production, 16 Peace, justice and strong institutions and 17
532 Partnerships for the goals) and indirectly (1 No poverty, 3 Good health and well-being, and
533 5 Gender equality).

534 Their resulting approaches allow them to help educate their clients and importantly create
535 social value on their projects irrespective of their clients' social value orientation. Working
536 across a range of sectors for different clients allows them to target 9.4 through upgrading
537 infrastructure and retrofitting industries thereby helping achieve better resource efficiency
538 and clean and environmentally sound technologies. In addition, this also helps them ensure
539 responsive, inclusive, participatory, and representative decision-making at all levels (target
540 16.7) and encourage and promote effective public, public-private, and civil society
541 partnerships, building on the experience and resourcing strategies of partnerships (target
542 17.17). Their approach to creating organisational learning throughout their supply chains
543 allows them to perform an important job of reintegrating a historically fragmented industry
544 and meet a verity of SDGs. For example, the increasing skills shortage is tackled through
545 training interventions and engaging older people, ex-offenders and care leavers for
546 employment, decent jobs, and entrepreneurship (target 4.4). At the same time, this will help
547 in substantially reducing the proportion of youth not in employment, education, or training
548 (target 8.6). By training the leaders of their most important supply chain partners they help
549 empower and promote the social, economic and political inclusion of all, irrespective of age,
550 sex, disability, race, ethnicity, origin, religion or economic or other status (target 10.2). In
551 addition, the efforts to continually increase expenditure with social enterprises helps to
552 promote public procurement practices that are sustainable, in accordance with national
553 policies and priorities (target 12.7).

554 3.5. Nexus: organisational learning, social value, SDGs, and resource efficiency

555 We find it interesting to discover that SDG 17 Partnerships for the goals attracts most
556 attention in our respondents' accounts. This is encouraging. As we note in the introduction,
557 the SDG 17 is essential and urgent for sustainable, inclusive, and resilient development
558 (Stibbe and Prescott, 2020: 6).

559 The development of the built environment has always been complex and diverse, and the
560 most common characterisation of the construction and infrastructure industry is that it is
561 fragmented. The key stakeholders in our research demonstrate that considerable
562 organisational learning effort is made with the aim of collectively achieving the SDGs.
563 Instead of drawing attention to others' contribution, or the abstract space in between, the
564 clients, consultant, local authority, and contractors included in this study make explicit
565 organisational commitment to value-based business. They dedicate substantial effort into
566 managing the interorganisational relations by understanding and communicating different
567 project partners' needs and priorities, and ensuring multiple stakeholders are involved in the
568 design and consultation processes. This supports our proposition that learning must occur
569 between organisations (as well as within) so that collectively they can realise the most
570 significant progress by co-creating social value.

571 Employing social practice theory as the framework for analysis helped us uncover how
572 organisations have learnt and developed their social value practice and it exposed the
573 agency-structure interplay. The clients report heavy emphasis on agency: relationships
574 between them and their customers, the relevant professional body, and a range of key
575 project stakeholders (such as the lead architect). The consultant and city council officer
576 highlight how structural elements like legislation and national policy guide change in their
577 practice. Importantly, it is the contractors who play a central role in bringing together the
578 different influences and managing the agency-structure interplay, whilst also negotiating
579 their own value base in the relationship.

580 Our findings demonstrate worthwhile progress towards closing the gap between short-term
581 behaviour and longer-term organisational learning that Bresnen and Marshall (2000) aired.
582 Certainly, this small selection of professionals in the built environment have embraced the
583 SDGs' global call for action: they have taken clear steps in organisational learning to realise
584 the partnership approach to creating and delivering social value, and showcase specific
585 ways of achieving the SDGs most closely connected to their business. As a system, they
586 collectively make substantial progress towards achieving most of the SDGs, yet the
587 partnership approach allows each stakeholder to carefully organise and direct their
588 resources towards the actions most relevant to them: the clients specialise in reducing
589 inequality (SDGs 5 and 10), the consultant focuses efforts on reducing environmental impact
590 (SDG 13) and the contractors contribution centres on education, work and innovation (SDGs
591 4, 8 and 9). The potential to leverage these benefits across the global construction and
592 infrastructure sector are huge.

593 The partnership approach offers promise to further organisational learning by utilising
594 strategic partnerships as a temporary hybrid organisation that combines institutional logics
595 and integrates distinct organisational capabilities and resources for the benefit of a project
596 or a programme (see Frederiksen and Gottlieb, 2020). This way of organising produces
597 knowledge that can be transposed by the individual companies, and in turn lead to company-
598 specific changes and innovations (ibid) where the partners learn from one another and in
599 time work towards achieving a more comprehensive range of the SDGs. Thus, we showcase
600 an example of a systemic method of organisational learning with dual aims: to help achieve
601 common good and secure organisational performance.

602 Resource efficiency is also achieved by our research participants' second and third most
603 prominent focus on SDGs 11 Sustainable cities and communities and 12 Responsible
604 consumption and production. Through inclusive and sustainable urbanization and enhanced
605 capacity for participatory, integrated and sustainable human settlement planning and
606 management (target 11.3) and promoting procurement practices that are sustainable, in

607 accordance with national policies and priorities (target 12.7) the clients, consultant, city
608 council officer, and the contractors influence the sourcing and use of resources from within
609 their wider supply-chains. Given our sampling strategy, it is no surprise that the
610 organisations are pioneering good practice. They are values driven, rather than motivated
611 by external pressures. Their social value-related organisational learning journeys are
612 continuous, and as much a part of the organisational culture as well as a process and an
613 outcome.

614 Our research confirms a significant and growing focus on learning through collaboration
615 within the built environment (Walker, 2016). The stakeholders' varied accounts direct
616 attention towards a nexus of SDGs that naturally aligns with the nature of work and
617 production in the built environment, most notably SDGs 11 Sustainable cities and
618 communities, 12 Responsible consumption and production, and 17 Partnerships for the
619 goals, but also SDGs 9 Industry, innovation and infrastructure, 10 Reduced inequalities, and
620 16 Peace, justice and strong institutions. Too tight a nexus can reproduce and reinforce
621 established industry standard and practice, and hinder innovation. Looking outside the
622 immediate industry-specific constraints can help overcome a silo mentality and enable more
623 synergistic approaches to achieving the SDGs. We call for improvement and further
624 organisational learning interventions that address people issues (e.g. SDGs 1, 2, 3, 4, 5, 8)
625 and environmental impact (SDGs 6, 7, 13, 14, 15). Social value as a construct that embraces
626 environmental impact and is more localised than the global SDGs appears to offer a more
627 specific framework for practice than the SDGs given their broad scope.

628

629 4. Conclusion

630 We present a case of transformation of an industrial and societal system in the built
631 environment towards more sustainable production and consumption patterns, through
632 processes of change. Social value is the national/ organisation level vehicle for realising the
633 SDGs at the centre of our study. We have employed social practice theory to examine
634 different stakeholders' organisational learning journeys on social value and the achievement
635 of the SDGs. We illustrate how interorganisational learning helps align the stakeholders'
636 efforts around a nexus of SDGs and thus achieve on those SDGs beyond what any individual
637 project or initiative is able to deliver. Social value and the SDGs are about action. We show
638 organisational learning as both a process, i.e. how the different stakeholders have
639 developed over time in terms of social value practice, and how this links with the outcomes
640 of the learning process: creating social value and the achievement of the SDGs. The
641 stakeholders' varied accounts direct attention towards a nexus of SDGs which naturally align
642 with the nature of work and production in the built environment, most notably SDGs 11
643 Sustainable cities and communities, 12 Responsible consumption and production, and 17
644 Partnerships for the goals. We call for improvement and organisational learning
645 interventions and action that addresses people issues and environmental impact. Social
646 value emerges as the construct more closely relevant to organisational practice than the
647 SDGs. Specific recommendations that can be made on the basis of our study include project
648 team collaboration (with client, design, and construction representatives); awareness raising
649 and engagement throughout extended supply-chains; contracting social enterprises; cross-
650 sector engagement; incorporating social value in corporate strategic plans and in key
651 business objectives; working with universities, schools and other learning providers;
652 apprenticeships; in-house training, development and support with careers; targeted
653 recruitment; flexible working; developing organisational culture; energy-efficient built-estate;
654 and carefully assessing and measuring social value. The continued growth of global

655 construction and infrastructure activity, which spreads across all SDGs, highlights the
656 significant potential impact contained within this partnership approach to organisational
657 learning.

658

659 Declaration of interests

660 We declare that there are no known competing financial interests or personal relationships
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662

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667

668 References

- 669 Abdel-Wahab, M.S., Moore, D.R., Gibbons-Woods, D., Kearny, G. and Pirie, T. (2009) An
670 evaluation framework for training: a case study in the northeast of Scotland. In: Dainty,
671 A.R.J. (Ed.) *Proceedings of the 25th Annual ARCOM Conference*, 7-9 September,
672 Nottingham, UK. Association of Researchers in Construction Management, Vol. 1, 627–34
- 673 Berner-Rodoreda, A., Bärnighausen, T., Kennedy, C., Brinkmann, S, Sarker, M., Wikler, D,
674 Eyal, N. and McMahon, S.A. (2018) From Doxastic to Epistemic: A Typology and Critique
675 of Qualitative Interview Styles, *Qualitative Inquiry*. DOI: 10.1177/1077800418810724
- 676 Bleischwitz, R., Spataru, C., VanDeveer, S.D., Obersteiner, M., van der Voet, E. Johnson,
677 C., Andrews-Speed, P., Boersma, T. Hoff, H. and van Vuuren, D.P. (2018) Resource
678 nexus perspectives towards the United Nations Sustainable Development Goals, *Nature*
679 *Sustainability*, 1, 737–743, DOI: 10.1038/s41893-018-0173-2
- 680 Bresnen, M. and Marshall, N. (2000) Learning to co-operate and co-operating to learn:
681 capturing knowledge of partnering in construction, In: Akintoye, A. (Ed.), *Proceedings 16th*
682 *Annual ARCOM Conference*, 6-8 September, Glasgow, UK, Association of Researchers in
683 Construction Management, Vol. 1: 313–23
- 684 CABE (2002) *Client guide for arts capital programme projects*, London: Commission for
685 Architecture and the Built Environment (CABE)
- 686 Chan, P., Cooper, R. Carmichael, S., Tzortzopoulos, P., McDermott, P. and Khalfam,
687 M.M.A. (2004) Does Organizational Learning create a Learning Organization? Conceptual
688 Challenges from a project perspective. In: Khosrowshahi, F (Ed.) *Proceedings 20th Annual*
689 *ARCOM conference*, 1-3 September, Herriot Watt University, Association of Researchers
690 in Construction Management, Vol. 2, 759-766
- 691 Chiponde, D.B., Gledson, B. and Greenwood, D. (2020) An Integrated Approach to
692 Learning from Project-Related Failures. In: Scott, L. and Neilson, C.J. (Eds.) *Proceedings*

- 693 of the 36th Annual ARCOM Conference, 7-8 September, UK, Association of Researchers
694 in Construction Management, 196-204
- 695 Coghlan, D. (2011) Organization development and action research, in *The Routledge*
696 *Companion to Organizational Change* (ed. Boje, D.M., Burnes, B. and Hassard, J.)
697 Abingdon: Routledge
- 698 Department for Communities and Local Government (2012) *National Planning Policy*
699 *Framework*,
700 [https://webarchive.nationalarchives.gov.uk/20180608095821/https://www.gov.uk/governm](https://webarchive.nationalarchives.gov.uk/20180608095821/https://www.gov.uk/government/publications/national-planning-policy-framework--2)
701 [ent/publications/national-planning-policy-framework--2](https://webarchive.nationalarchives.gov.uk/20180608095821/https://www.gov.uk/government/publications/national-planning-policy-framework--2) [Accessed 20 May 2020]
- 702 Dunphy, D., Turner, D. and Crawford, M. (1997) Organizational learning as the creation of
703 corporate competencies, *Journal of Management Development*, 16 (4): 232-244
704 <https://doi.org/10.1108/02621719710164526>
- 705 Frederiksen, N. and Gottlieb, S.C. (2020) From Partnership to Firm: Hybridity as Source of
706 Routine Change. In: Scott, L. and Neilson, C.J. (Eds.), *Proceedings 36th Annual ARCOM*
707 *Conference*, 7-8 September, [online] UK, Association of Researchers in Construction
708 Management, 55-64
- 709 French, W. and Bell, C. (1999) *Organization development*. 6th edn. Upper Saddle River,
710 NJ: Prentice-Hall
- 711 Giddens, A. (1984) *The Constitution of Society: Outline of the Theory of Structuration*,
712 Cambridge: The Polity Press
- 713 Given, L.M. (2008) Conversational Interviewing, *The SAGE Encyclopedia of Qualitative*
714 *Research Methods*, Thousand Oaks, CA: SAGE Publications, DOI:
715 10.4135/9781412963909
- 716 Global ABC (2019) *2019 global status report for buildings and construction: Towards a*
717 *zero-emission, efficient and resilient buildings and construction sector*. Global Alliance for
718 Buildings and Construction, International Energy Agency and the United Nations
719 Environment Programme, [https://www.unenvironment.org/resources/publication/2019-](https://www.unenvironment.org/resources/publication/2019-global-status-report-buildings-and-construction-sector)
720 [global-status-report-buildings-and-construction-sector](https://www.unenvironment.org/resources/publication/2019-global-status-report-buildings-and-construction-sector) [Accessed 14/02/2021]
- 721 Global Data (2018) *Global Construction Outlook to 2022: Q3 2018 Update*, London: Global
722 Data UK Ltd, [https://store.globaldata.com/report/gdcn0010go--%20global-construction-](https://store.globaldata.com/report/gdcn0010go--%20global-construction-outlook-to-2022-q3-2018-update/)
723 [outlook-to-2022-q3-2018-update/](https://store.globaldata.com/report/gdcn0010go--%20global-construction-outlook-to-2022-q3-2018-update/) [Accessed 22 December 2020]
- 724 Goubran, S. (2019) On the Role of Construction in Achieving the SDGs. *Journal of*
725 *Sustainability Research*, 1 (2), DOI: 10.20900/jsr20190020
- 726 Günzel-Jensen F., Siebold, N., Kroeger, A., and Korsgaard, S. (2020) Do the United
727 Nations' Sustainable Development Goals matter for social entrepreneurial ventures? A
728 bottom-up perspective, *Journal of Business Venturing Insights*, 13: 1-8
- 729 Guppy, L., and Anderson, K. (2017) *Water Crisis Report*, United Nations University
730 Institute for Water, Environment and Health, Hamilton, Canada.
731 <https://inweh.unu.edu/global-water-crisis-the-facts/> [Accessed 14/02/2021]
- 732 Hargreaves, T. (2011) Practice-ing behaviour change: Applying social practice theory to
733 pro-environmental behaviour change, *Journal of Consumer Culture*, 11 (1): 79-99

- 734 Loosemore, M (2016) Social procurement in UK construction projects, *International*
735 *Journal of Project Management*, 34: 133-144
- 736 Loosemore, M., Dainty, A.R.J. and Lingard, H. (2003) *Human resource management in*
737 *construction projects, strategic and operational approaches*, London: Spon Press
- 738 Miner, A.S. and Mezias, S.J. (1996) Ugly Duckling No More: Pasts and Futures of
739 Organizational Learning Research, *Organization Science*, 7 (1): 88-99
- 740 Ministry of Housing, Communities and Local Government (2019) *Design: Process and*
741 *Tools*, <https://www.gov.uk/guidance/design#effective-community-engagement-on-design>
742 [accessed 14 May 2020]
- 743 Muhmad, S.N. and Muhamad, R. (2020) Sustainable business practices and financial
744 performance during pre- and post-SDG adoption periods: a systematic review, *Journal of*
745 *Sustainable Finance & Investment*, DOI: 10.1080/20430795.2020.1727724
- 746 OECD (2012) *Environmental Outlook to 2050: the consequences of inaction*, Organisation
747 for Economic and Co-operative Development, [https://www.oecd.org/g20/topics/energy-](https://www.oecd.org/g20/topics/energy-environment-green-growth/oecdenvironmentaloutlookto2050theconsequencesofinaction.htm)
748 [environment-green-](https://www.oecd.org/g20/topics/energy-environment-green-growth/oecdenvironmentaloutlookto2050theconsequencesofinaction.htm)
749 [growth/oecdenvironmentaloutlookto2050theconsequencesofinaction.htm](https://www.oecd.org/g20/topics/energy-environment-green-growth/oecdenvironmentaloutlookto2050theconsequencesofinaction.htm) [Accessed
750 14/12/2021]
- 751 Onwuegbuzie, A.J. and Leech, N.L. (2007) A Call for Qualitative Power Analyses, *Quality*
752 *& Quantity*, 41: 105–121, DOI: 10.1007/s11135-005-1098-1
- 753 Opoku, A. (2016) SDG2030: A Sustainable Built Environment's Role in Achieving the Post-
754 2015 United Nations Sustainable Development Goals. In: Chan, PW and Neilson, CJ
755 (Eds.), *Proceedings 32nd Annual ARCOM Conference*, 5-7 September, Manchester, UK:
756 Association of Researchers in Construction Management, 1101-1110
- 757 Opoku, A. (2019) Biodiversity and the built environment: Implications for the Sustainable
758 Development Goals (SDGs), *Resources, Conservation & Recycling*, 141: 1-7
- 759 Opoku, A., Fortune, C. (2011) Organizational learning and sustainability in the construction
760 industry, *The Built & Human Environment Review*, 4 (1): 98–107
- 761 Ortenblad, A. (2001) On differences between organizational learning and learning
762 organization, *The Learning Organization*, 8 (3): 125-133
- 763 Pedler M., Burgoyne, J. G. and Boydell, T. (1991) *The learning company: a strategy for*
764 *sustainable development*, Maidenhead: McGraw-Hill
- 765 Raiden, A.B. and Dainty, A.R.J. (2006) Human Resource Development in Construction
766 Organisations: An Example of a 'Chaordic' Learning Organization? *Learning Organization*,
767 13 (1): 63-79
- 768 Raiden, A.B., Loosemore, M., King, A. and Gorse, C. (2019) *Social Value in Construction*,
769 Abingdon: Taylor and Francis, ISBN: 9781138295094
- 770 Reckwitz, A. (2002) Toward a theory of social practices: A development of culturalist
771 theorizing, *European Journal of Social Theory*, 5: 243-263

- 772 Ricciardi, F. Cantino, V. and Rossignoli, C. (2020) Organisational learning for the common
773 good: an emerging model, *Knowledge Management Research & Practice*, DOI:
774 10.1080/14778238.2019.1673676
- 775 Sachs, J., Schmidt-Traub, G., Kroll, C., Lafortune, G., Fuller, G. and Woelm, F. (2020) The
776 Sustainable Development Goals and COVID-19. *Sustainable Development Report 2020*,
777 Cambridge: Cambridge University Press
- 778 Schatzki, T.R. (1996) *Social Practices: A Wittgensteinian Approach to Human Activity and*
779 *the Social*, Cambridge: Cambridge University Press
- 780 Schatzki, T.R., Knorr Cetina, K. and Von Savigny, E. (2001) *The Practice Turn in*
781 *Contemporary Theory*, London: Routledge
- 782 Senge, P.M. (1990) *The fifth discipline: the art and practice of the learning organization*,
783 New York: Doubleday
- 784 Shove, E., Pantzar, M. and Watson, M. (2012) *The Dynamics of Social Practice*, London:
785 SAGE
- 786 Smith, P.J. and Sadler-Smith, E. (2006) *Learning in Organizations: Complexities and*
787 *diversities*, Abingdon: Routledge
- 788 Stibbe, D. and Prescott, D. (2020) *The SDG Partnership Guidebook: A practical guide to*
789 *building high impact multi-stakeholder partnerships for the Sustainable Development*
790 *Goals*, The Partnering Initiative and UNDESA
- 791 Supply Chain Sustainability School (2017) *Social Value and Design of the Built*
792 *Environment*, London, The Supply Chain Sustainability School,
793 <https://www.supplychainschool.co.uk/wp-content/uploads/2019/10/Resource-ID-5670.pdf>
794 [Accessed 15 February 2020]
- 795 United Nations (2015) *Transforming Our World: The 2030 Agenda for Sustainable*
796 *Development*. UN General Assembly. <https://sdgs.un.org/2030agenda> [Accessed
797 13/2/2021]
- 798 United Nations (2019) *World Population Prospects*.
799 <https://population.un.org/wpp/Download/Standard/Population/> [Accessed 14/12/21]
- 800 United Nations (2020) *SDG Good Practices: A compilation of success stories and lessons*
801 *learned in SDG compilation*. United Nations: [https://sdgs.un.org/publications/sdg-good-](https://sdgs.un.org/publications/sdg-good-practices-2020)
802 [practices-2020](https://sdgs.un.org/publications/sdg-good-practices-2020) [Accessed 10/2/2021]
- 803 van Eijnatten, F.M. (2004) Chaordic systems thinking: some suggestions for a complexity
804 framework to inform a learning organization, *The Learning Organization*, 11 (6): 430-449
- 805 Walker, D.H.T. (2016) Reflecting on 10 years of focus on innovation, organisational
806 learning and knowledge management literature in a construction project management
807 context, *Construction Innovation*, 16 (02): 114-26
- 808 Wang, C.L. and Ahmed, P.K. (2003) Organisational learning: a critical review, *The*
809 *Learning Organisation*, 10 (1): 8-17

ⁱ We have not provided a reference to this article in order to preserve the anonymity of the participating organisation.