COMMUNICATION STRATEGY TOOL USER GUIDE

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OVERVIEW

The application of Cradle to Cradle (C2C) principles in business sites is likely to be hampered by several barriers, some of which are socio-cultural in nature. To promote change and new thinking in the way business sites are designed, built and operated, there is the need to properly understand socio-cultural issues that create 'lock-in' to existing practices (Peterson and Anderson, 2009) so that these can be taken into account in the way C2C is presented to different business site stakeholders to secure their commitment to C2C inspired projects.

These socio-cultural barriers are deeply rooted in the basic assumptions and value priorities of stakeholders. Strategies for communicating and promoting the C2C vision must therefore be aligned with such stakeholder value priorities and assumptions.

In this regard, a C2C Communication Strategy Tool has been developed to:

- help diagnose the dominant value priorities and interests of business site stakeholders; and
- map onto these dominant value priorities and interests, those relevant value propositions within the C2C vision that most align with the needs of the stakeholders concerned.

Thus whereas stakeholder groups are likely to have different value priorities, by using the tool to understand the value priorities of a stakeholder and presenting specific messages that have been framed to reflect their value priorities, communication of the C2C vision will be more effective. Ultimately, stakeholders will then not only take more of an interest in C2C, but will also be more inspired to pursue this vision on their business sites – making commitment to C2C inspired projects more certain.

Methodology for Tool Development

In developing the Communication Strategy Tool, the first step was to identify socio-cultural issues that are likely to hamper adoption of C2C amongst business site stakeholders. Some of these socio-cultural issues, which are summarised below in Table 1 were synthesised from studies by Petersen and Andersen (2009) and Hoffman and Henn (2008) alongside other relevant literature.

Table 1: Potential socio-cultural barriers to implementation of C2C in the built environment

EXAMPLES OF TENSIONS THAT COULD CREATE BARRIERS	
1	Self-interest versus Collaboration
2	Short-term versus Long-term Focus
3	Risk aversion versus Risk affinity
4	Knowledge rejection versus Knowledge seeking
5	Projection of positive illusions versus Confronting reality of poor practices
6	Rigidity versus Flexibility

The need for closer collaborative working was revealed as an important socio-cultural issue that can influence the implementation of C2C on business sites. A high level of collaboration could be required at the design stage where architects, environmental experts, material chemists or renewable energy experts would have to work together in designing a scheme to achieve C2C goals.

A high level of collaboration could also be required to ensure that there is considerable knowledge sharing across organisational boundaries. With regards to the operation of business sites, a high level of collaboration could also be required amongst tenants to facilitate material exchanges. This collaboration could however be threatened by the competing interests amongst stakeholders for example between developer and tenant stakeholders due to the split nature of incentives that arise from incorporating C2C elements into a development.

Another socio-cultural issue relates to tendency for business site stakeholders to be more concerned with short-term rather than long-term goals. There is the tendency for developers to place more emphasis on making immediate returns on their investment rather than on decisions that yield longer term benefits such as lower operating costs of facilities. This short-term focus could be a potential barrier to C2C implementation in business sites.

The issue of risk would also have to be confronted as often, new technologies, routines and processes are associated with high unforeseen risks. Even banks and financial institutions can be hesitant in financing unproven technologies and insurance premiums tend to be higher because future risks are unknown. The lack of flexibility is also another socio-cultural issue as inflexible, overly controlled environments, inflexible laws and regulations or over-dependency on standards can inhibit innovation. Debacker et al. (2011) found for example that inflexible laws and regulations were a major barrier to implementation of C2C principles in the built environment. There is also a tendency to project aspirational virtues rather than confronting the reality of actual behaviours when it comes to environmental responsibility.

Having identified these socio-cultural issues, the next step was to identify an appropriate theoretical framework that can be used to understand a stakeholder organisation's orientation in relation to these socio-cultural issues. Different frameworks such as Hofstede's Value Survey (HVS) Module, the Competing Values Framework (CVF), Schwartz Value Survey (SVS) and the Organisational Culture Inventory (OCI) were appraised, and the CVF was considered the most appropriate for understanding socio-cultural issues that are likely to prevail in a stakeholder organisation. The CVF is based on the theory that organisations promote different values which are in competition with each other such that the dominant value priority of the organisation can be used as a descriptor of their operating culture (Quinn and Rohrbaugh, 1983).

The CVF as shown in Figure 1 consists of four organisational value priorities that are in constant competition - collaboration, innovation, competition and control. These value priorities determine orientations towards risk, collaboration and new knowledge. Organisations are more likely to pursue new strategies or invest in change only when this aligns with their value priorities.

Figure 1: Competing Values Framework
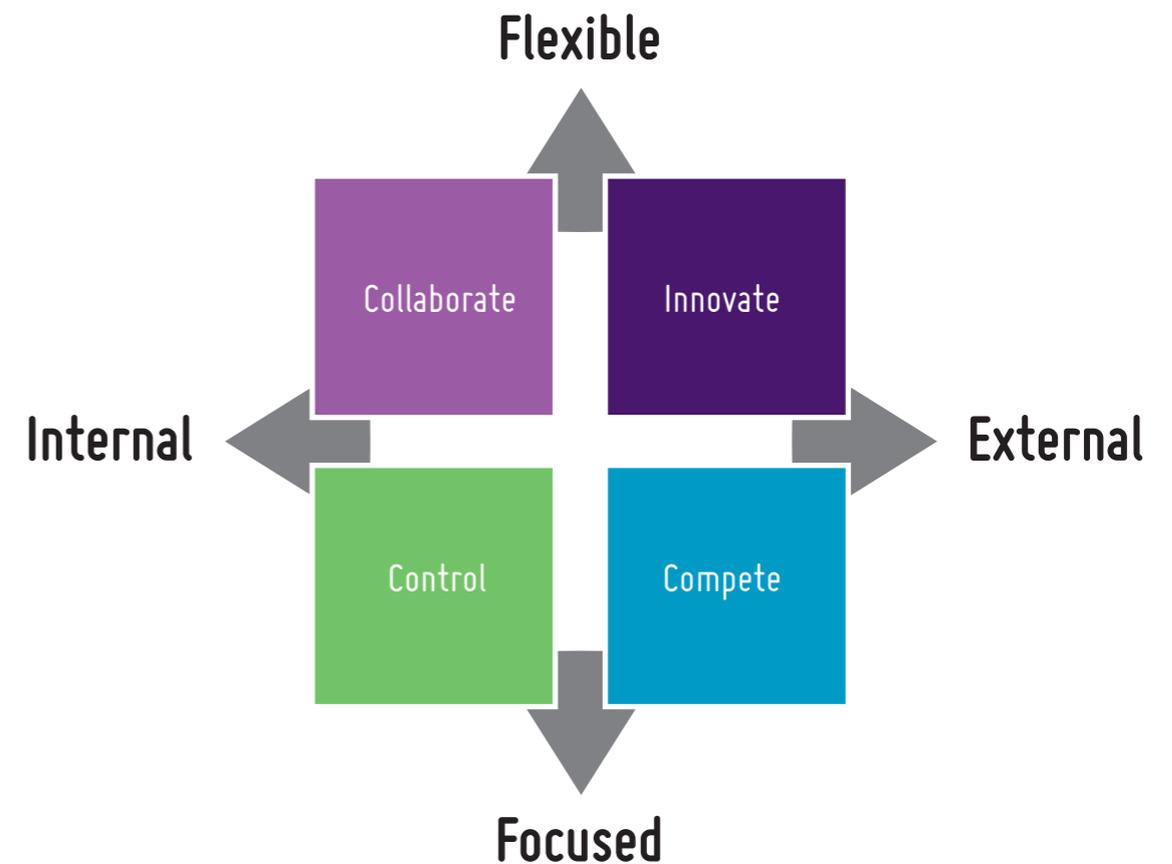
The control (internal process) quadrant represents organisations that focus on the use of formal structures to achieve organisational efficiency. Such organisations are dominated by a hierarchal culture. The collaborative (human relations) quadrant represents organisations that focus on employee development and the creation of a stimulating work environment that facilitates social interaction. Such organisations are dominated by a group culture.

The innovative (open systems) quadrant represents organisations that focus on adaptability and readiness in their quest to achieve growth. Such organisations are flexible enough to adapt to changes, place emphasis on innovation, promote risk-taking and always create new challenges. The competition (rational goal) quadrant represents organisations that focus on rational goal setting and planning based on the demands from the external environment. The structure and decision making process of such organisations are designed to facilitate planning; forecasting so as to achieve efficiency.

The next step in the Communication Strategy Tool development was to empirically test the CVF on business sites to see if stakeholder value priorities map favourably onto their preferred approach to the development or operation of a business site.

After analysing both qualitative and quantitative data obtained from business sites across the UK and some EU countries (with C2C interests), it was revealed that their dominant value priorities – as determined using the CVF – was indeed a good determinant of the socio-cultural issues that manifested in the different organisations as well as their preferences in relation to the development or operation from the business site.

As an example, a developer that had a dominant organisational value of innovation (open systems culture) explained why they prioritized flexibility in their development:

"that's what the client seems to want here. It's that speed of change, the flexibility, get in there, change it, do it now and kick things off — get it finished — strip it all back again. That's what they want to be able to do."

Facilities Manager, Case 1

Their major selling point was flexibility that allowed members to quickly build temporary structures within their technology centre that could be used to manufacture or trial new processes in a research-type environment before large scale deployment at a production facility. This easy adaptability of workshop floor spaces where different buildings could be constructed within the centre and then later dismantled was constantly highlighted as the most attractive feature to member companies – reflecting the developer's own value priority as an R&D organisation.

Another organisation that had a dominant value priority of innovation revealed their primary motivation for integrating renewable energy technologies in their business site:

"Because of all what we have done, so it's the fact that we have developed this concept of Ecoparc Windhof that we constructed — let's say state of the art buildings with solar panels, with the windmills, with the geo thermal energy and so on. All this attracted the eyes of the world around"

Project Manager, Ecoparc – Case 2

Their motivation was to attract attention to the development by showcasing world-class innovations on their business site.

The developer in Case 3 emphasised their desire to provide tenants with a high quality park environment, a reflection of their collaborative value (human relations culture) priority:

"…so we have to create a habitat — flora, fauna, bio-diversity, which has worked very, very well and, over the time, it's become a very lovely place. We've got nature trails, lots of bird boxes that people put in — all that kind of thing…it was unique having the countryside park, which is unique and so it was to make that as a selling point to the park"

Park Manager, Case 3

This developer integrated a lot of bio-diversity into the park environment so as to create a lovely quality environment for tenants, which had now become their selling point. This is probably because as an organisation, they themselves prioritised human resource development and collaboration above other concerns and as such consider this as something they also have to offer to their tenants.

The UW Park (Case 8) emerged as the only organisation that had dominant value priorities of collaboration and control. This was a public sector education provider that was interested in mentoring their university graduates to engage in business start-ups so as to boost graduate and local employment. A strong bureaucratic culture that existed in this organisation however resulted in risk aversion towards aspects of the C2C vision that related to on-site treatment of waste. The park manager was more concerned about the health and safety (H&S) and other hazardous consequences of promoting on-site recycling and waste treatment.

The developer of WB Park (Case 9) had competition as their dominant value priority. This developer mainly had a commercial focus as their primary objective was to ensure that optimum investment was channelled into the park to attract enough tenants and buyers and make returns from their investment.

The main motivation for any decision made on the park was to maximize their investment return:

> "...as a developer, you're looking to make profit, so the barrier's always going to be cost. So, you've got these two tensions, as I said just now, you want to make the scheme as attractive as you possibly can because if you don't get occupiers, you'll be nothing.
>
> So, you've got to be aware of what their requirements are and you've got to provide for that, but you've got to do it in a way which doesn't cripple you financially... we build what the market wants"
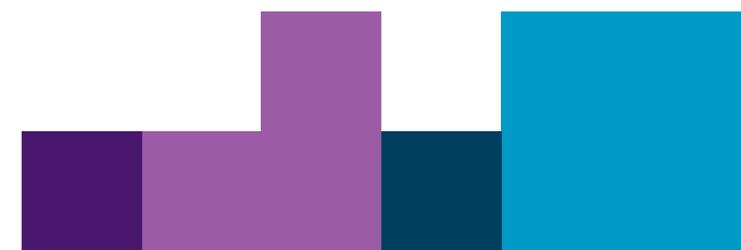
Developer, WB Park – Case 9

They recognised that they were in competition for tenants and property buyers and were only prepared to build what the market currently demanded whilst ensuring that payback periods for their investment was kept to the shortest possible time. The main C2C vision that seemed to align with their value priority was the increase in commercial activity on the park through integration of diverse amenities – mixed use development. The developer indicated their plans to promote other allied facilities on the site given that this would give the park a commercial boost.

All these findings affirm the utility of the CVF for understanding organisational behaviour, and were used to compile C2C value propositions that should be communicated to stakeholders based on their business interest – as inferred from their dominant value priorities on the CVF. This is summarised briefly in Table 2.

Table 2: Stakeholder value priorities and corresponding C2C value propositions

Stakeholder Value Priorities	C2C Value Propositions that should be embedded in promotional materials	Case Study Examples[1]
COLLABORATE		
This stakeholder promotes human resource development, internal flexibility and knowledge sharing across functional units.	■ Fosters collaboration amongst facility users. ■ Delivers a healthy, inspiring and comfortable work environment. ■ Reduces employee turnover. ■ Attracts best talent.	Developer in **Case 3** was a collaborative organisation that recognized the importance of an environment that attracts high calibre employees. This priority translated into design of an inspiring and comfortable countryside business park with nature trails, cycle paths, lakes, etc.
CONTROL		
This stakeholder strives for risk minimization and conformity to existing procedures and regulations.	■ Showcases good practice standards. ■ Complies with existing laws and regulations thus avoiding fines or penalties. ■ Increases control of future operating costs. ■ Provides security of energy and water supply. ■ Boosts local employment opportunities.	**Case 8** is an organisation that recently switched from partial to full ownership of a science park with the view of meeting their social goal of increasing graduate employability. This value priority enabled them provide mentorship to businesses with the ultimate aim of boosting local employment rather than profit.

1 Examples from nine case studies undertaken into stakeholder value priorities and how these reflected in their business sites design and operation

Stakeholder Value Priorities	C2C Value Propositions	Case Study Examples[1]

COMPETE

This stakeholder focuses on overcoming external competition and efficiency through cost minimization.	■ Offers competitive market advantage. ■ Increases commercial attractiveness of the property to potential tenants. ■ Reduces running cost of operating environment. ■ Attracts marque clients or increase customer base. ■ Increases commercial diversity. ■ Increases business productivity output.	**Case 7** was a developer whose prime focus was competitive advantage over other business parks. C2C allowed them to pitch their park as a high quality premier brand that would attract marque clients, and ultimately achieve higher rents. **Case 9** was a developer whose primary concern was to attract tenants and buyers for their properties and make return on their investment. Given their commercial focus, the main interest they expressed regarding the C2C vision was the commercial boost that could result from integrating diverse amenities on the site.

INNOVATE

|		
This stakeholder promotes constant change and dynamism, encourages risk taking and is very flexible and adaptive so as to accommodate new technologies.	■ Creates dynamic environment to develop and get the newest technology or product to market. ■ Offers flexible and easily adaptable facilities. ■ Offers highly ambitious and visionary developments that inspire creativity.	**Case 1** was an R&D organisation. Their facility was designed to be flexible and readily adaptable to changing manufacturing processes and new technologies. This reflects the premium placed on innovation. **Case 6** related to the LSIP where developer's priority was on "pushing the boundaries" by looking at "new innovations…and how they can be brought to the market". C2C propositions on innovative use of waste aligned with this ambition. Hence their adoption of C2C.

Tool Development and Composition

To develop the Communication Strategy Tool, the C2C value preferences and motivational considerations of business site stakeholders that participated in the study were isolated and grouped in relation to their organisational culture profile – as determined using the CVF. The underlying logic is that organisations with similar value profiles would most likely be interested in the same C2C value preferences and have similar motivational considerations. Thus, if a potential business site stakeholder that is unaware of C2C is first profiled to understand their dominant value priority before presenting C2C propositions that most resonates with this priority, the stakeholder would most likely find it attractive to their business.

The tool itself, which is compiled in MS Excel comprises: (i) an organisational profile section; (ii) a profile output section; and (iii) a communication strategy section. The organisational profile section consists of an empirically derived and validated CVF questionnaire that for many years has been applied in several studies on cultural change and in recent years, sustainability behaviour in organisations.

This questionnaire comprises five main questions which seek to gain some insight into the organisational culture orientation of stakeholder organisations. These five questions are on organisational character, organisational leadership, organisational cohesion, organisational emphasis and organisational rewards.

The profile output section shows summary scores and a radar chart that gives indication of the organisation's dominant value priorities in relation to four options: human relations culture, open systems culture, rational goal culture and internal process culture. The radar chart gives a graphical representation of the stakeholder's cultural orientation. In the communication strategy section, the dominant cultural orientation of the stakeholder is mapped onto the appropriate C2C message that reflects the value priority of this stakeholder.
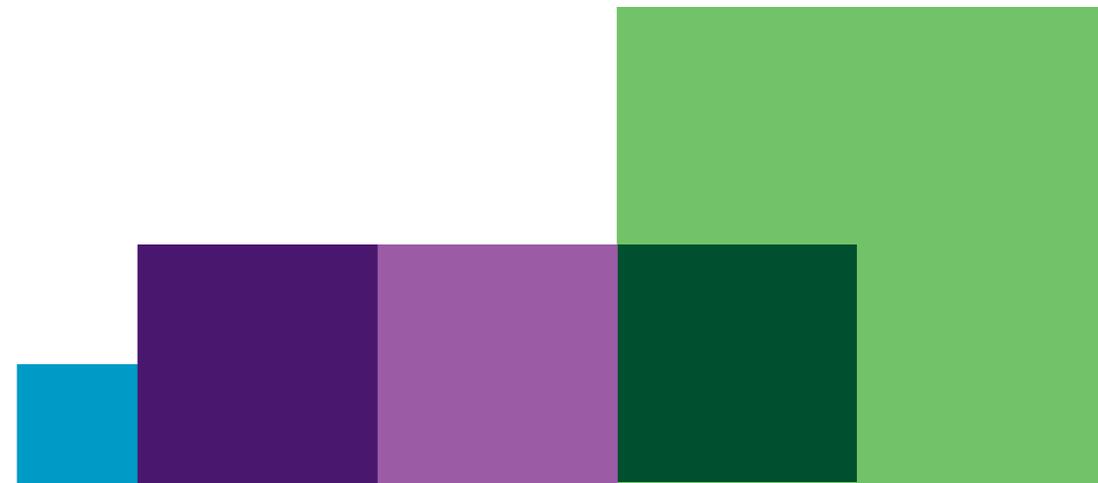
How to Use Toolkit

Step 1

Having read the content of the 'Home' page, the stakeholder being profiled must access the organisational profile section by clicking the 'Questionnaire' tab which then opens up the CVF questionnaire. The stakeholder is required to distribute scores based on the extent to which the typologies of hypothetical organisations used in the questionnaire resemble their own organisation. The person answering the questions should be very familiar with their organisation's mode of operation.

Step 2

After completing the questionnaire, the user would have to click on the tab that best describes what they want to find out. The 'What C2C offers you' tab provides the user insight into what their dominant value priorities are as an organisation and how C2C effectively addresses those priorities. Stakeholder organisations that may require such information include prospective tenants or developers. The 'How to promote C2C' tab provides the user with insight into the value priorities of the stakeholder organisation being profiled and how C2C can be most effectively promoted to them in a way that responds to their priorities. Stakeholder organisations that may require such information include promoters or property marketing agencies.

Strength and Limitations of the Tool

The communication strategy tool offers a simple but effective means to diagnose the dominant operating culture of a stakeholder organisation, and understand how this operating culture relates to socio-cultural issues that are likely to drive or inhibit interest in different aspects of C2C value propositions and visions. The tool can be used to map C2C value propositions and goals in a way that most resonates with the dominant value priorities of any identified stakeholder.

The tool does not however guarantee that the commitment of the stakeholder can be secured in terms of making the necessary financial investments as it only seeks to increase their interest in C2C. The Communication Strategy Tool does not also guarantee that the C2C messages and goals would be necessarily achieved on a business site.

To secure stakeholder buy-in or commitment and to realise the C2C goals and benefits that have been embedded in the communicated message, other issues such as financing options, business case and governance structures would have to be given consideration as these would be required to set appropriate goals for different stakeholders as well as ensure that these goals translate into reality.

Lastly, this tool only attempts to specify aspects of the C2C vision and value propositions that should be emphasised to different stakeholders. It does not address all the components of a communication strategy such as the channels and media for communicating the C2C message.
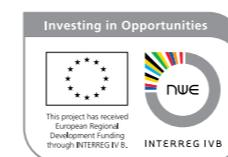
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