Part 1
The context for innovation
1. Introduction

Construction is often seen as an embattled industry. The repeated critique of numerous reports questions the ability of the construction industry to innovate and manage change to improve its practices. In response to this, a priority theme for re-engineering construction was initially settled upon within the International Council for Research and Innovation in Building and Construction (CIB) in 1997 at the CIB board meeting in South Africa. However, it did not really get off the ground until 2001 when work was put in hand to create a strategy for the development of the theme. This was carried out by Courtney and Winch (2002) and led to a re-orientation around the notion of ‘revaluing construction’ and a stream of activities that are summarised in Barrett (2007). This latter work involved five workshops, each in a different country, namely Australia, Canada, Singapore, the UK and the US. A postal questionnaire survey (Lee and Barrett, 2006) to the five countries also provides important underpinning.

The main thrust of results of this work on revaluing construction is encapsulated in seven areas for change. Each of these is not in itself extraordinary, but when dynamically linked these have the potential to fundamentally change construction for the good of those involved, their customers and for society. The ‘infinity’ model given in Figure 1.1 outlines these seven areas and suggests how they must be connected to make progress.

1.2. Infinite options!

The following sections explore the seven areas of the infinity model for revaluing construction with particular reference to the client’s role.

1.2.1. Holistic idea of construction

There are starkly different ways of conceiving of construction. The standard industrial classification (SIC) system is the basis of the normal economic perspective and places construction within F45 (construction), a cluster of activities that includes site preparation, building of completed constructions or parts thereof, civil engineering, building installation, building completion, and renting of construction or demolition equipment with operator. The focus is entirely on the physical construction activities. As a consequence, as Winch (2003) points out, ‘the bundling of “construction” goods and services used for the SIC is systematically different from that in all other sectors’ (p. 652). It
draws a line between these and intimately linked, value adding activities, such as even the parallel work of architectural and technical consultancies. Crucially, downstream activities such as real estate activities and facilities management concerned with the use phase of buildings are also left out (Ruddock and Wharton, 2004).

An alternative stance starts with the proposition that construction is a change agent for the creation, development, maintenance and operation of the built environment so that it supports the quality-of-life and competitiveness requirements of society. That is, ‘construction is a means to a means to an end’ (Barrett, 2003). This makes a broader conception of construction entirely logical so that its full contribution to society can be understood. This type of thinking is central to the work of Jean Carassus of CSTB in Paris, who with a group of international colleagues developed and populated a shared economic framework within Task Group 31 of the CIB (Carassus, 2004).

The framework takes the full building life cycle of new construction, management of the service provided by the built environment and demolition. Included in the middle phase are maintenance, major repairs and refurbishment. Taking a vertical view of the framework (from top to bottom) leads from the stream of activities required to create and sustain the built environment, to the panoply of actors or stakeholders with varying degrees of involvement. This ranges from real estate agents and property and facilities managers with an on-going involvement with the asset to those with a short-lived involvement via projects, such as developers, project managers, architects and contractors. Underpinning their activities are the associated contributions of manufacturers and distributors. Lastly, contextualising the whole sector are the institutional actors at various geographical levels together with professional representative organisations and user associations themselves. These together infuse the sector’s norms, regulations and expectations.

The thrust of Carassus et al. is to shift thinking from an ‘industry’ focus on simply building buildings to a ‘construction sector system’ approach with the emphasis on producing and managing the services rendered by these structures throughout their life cycle to support an efficient and sustainable economy. Positively, in the UK the Strategic Research Agenda published by the recently created National Platform for
A global agenda for revaluing construction

The Built Environment (2006) has already drawn from this aspect of the revaluing construction work, doubling its estimate of the size of construction from 10% to 20% of gross domestic product and focusing broadly on the built environment, including the use phase.

Within this service-orientated view, clients, users and facilities managers hold a vital position in driving for the type of built environment they want and need and so defining the capabilities of the construction industry required to bring this about. Of course, clients vary considerably and so it should be expected that complex, sometimes contradictory, views will emerge, but this does not undermine the centrality they must take in any analysis.

1.2.2. Shared vision amongst stakeholders

The broader conception of construction set out above can inform the creation of a shared vision amongst key stakeholders for the maximising of value across the whole life cycle of constructed artefacts. It is suggested that a re-valued industry will maximise the initial creation of potential value in a particular building/project through pre-design and design activities, its delivery through construction, realisation in use and synergies with other developments at an urban level.

To inform the wide-ranging scope of this conception of construction, it is clear that a broad constituency of stakeholders needs to be engaged to develop and sustain a vision for construction. Moving beyond the construction industry itself defining a strategy, it is clear that without the manufacturers and suppliers involved many opportunities for improved efficacy and efficiency would not surface, without active involvement from clients and users effectiveness is likely to be inadequately addressed, and without societal representation in terms of planners and representative groups the ethicality of proposals is likely to be underdeveloped.

Lastly, without some design input the competing demands of the multitudinous and diverse stakeholders are unlikely to resolved into elegant solutions. On this last point, two aspects need clarification. First, the term ‘elegant’ is meant conceptually and practically in that the solutions involve sufficient complexity, but are as simple as they can be. Second, ‘designers’ here are not building designers, but rather ‘leaders as designers’ (Senge, 1990, pp. 341–345) at various levels who understand the complexities of the ‘system’ and put together the ideas and the infrastructure in ways that enable the industry to perform to its full potential. At the top level come shared visions held jointly by key national, leading stakeholders; here the client influence is key.

Bringing together the relevant groups and engendering productive co-working is a complex political process. The form of the Danish clients’ association raises an issue that moves the discussion onto a different level. In the UK, the creation of CRISP (Construction Research and Innovation and Strategy Panel) was seen as the solution with a single forum within which the main players in the industry could generate a strategic view. The Danish clients’ forum is strongly independent, and linking this point to the wide range of stakeholders with something to offer, indicated earlier in this section, the notion of a dialectic among various stakeholder voices seems a looser, but arguably a more dynamic and richer way is to imagine creating a consensus around a meaningful shared vision. Ideally, the scope of such an arrangement would have a strong role for clients and service providers, but with a clear axis with government policy leadership.
for the necessary motivation and action to occur. It is common to say that the industry is unduly fragmented, but it is common too for the government interests in construction, such as planning, housing, construction itself, etc., to be located in different ministries and to have diverse remits and concerns. So, it is reasonable to suggest that the leadership provided by governments at a policy level often needs to be harnessed collectively so that a clear dialogue can be held with the other actors. The third axis is to education and research, primarily through universities. There is available a wealth of relevant knowledge about practices worldwide, robust conceptual models, experience in other sectors, and educational solutions for long-term change. This dimension completes a balanced set of groups that represent different perspectives and that can through a debate, not devoid of tensions, fashion a robust, shared vision.

Creating a vision is one thing, but VTT (2005) reviewed 16 construction industry strategies from around the world and found that ‘implementation is barely covered’ (p. 10). For a sustainable vision to robustly underpin medium-term transformation, the workshops highlighted the importance of emphasising equitable returns to all stakeholders, as well as the sheer maximisation of the collective value created. Being fully inclusive is a good first step though. If parties are left out, as has often been the case in the past, then they will not be harnessed as advocates. It is interesting to note in this context that an international postal questionnaire survey about innovation in construction (Lee and Barrett, 2006) highlighted that institutional bodies ‘protecting their own interests’ were the second highest rated inhibitors of the adoption of new practices, but the highest were clients ‘protecting their own interests’. Thus it is crucial that a client voice is actively encouraged and engaged with.

1.2.3. Balance of markets and social capital

Clients have a key role in how the market for construction work operates. Cut-throat competition, unscrupulous low bidders, lack of trust and poor risk management are very commonly quoted characteristics of construction. These are implicitly reinforced by standard contracts, custom and practice and the sheer confrontational nature of the industry. Do the benefits accrued justify the direct and opportunity costs involved?

The generic question about the ‘pay-offs’ associated with the pursuit of short-term personal gain is addressed in the ‘prisoner’s dilemma’ experiments with their roots in game theory (Kay, 1993, pp. 35–49). The main features of the successful cooperative strategies in iterated games are as follows: the participants begin by expecting the other player to cooperate, not that he or she will cheat; they respond to bad behaviour and punish it, but not too severely; and they are forgiving. Interestingly at the broader societal level, Sacks (2002) makes a parallel argument for valuing relationships borne of on-going interactions (pp. 149–160). These, he argues, will be created at a local level within groups of people that share a bond that goes beyond individual transactions and could be called ‘social capital’ or the level of trust in a society. Sacks (2002) takes the argument beyond the benefits for contractual dealings and distinguishes these from what he terms ‘covenantal’ relationships. These are often evident in family life, but in broader life are sustained by loyalty, responsibility, fairness, compassion – professionalism at its best. Without these trust-based, reciprocal relationships and the institutions that support them, ‘markets and states begin to fray… social life itself loses grace and civility’.
A global agenda for revaluing construction

So, how does this relate to construction? The commercial environment for construction has been typified as ‘competition is good; more competition is better’ (Ang, 2004). This resonates with Hendriks’ (2004) phrase ‘the poison is the dose’, that is, something that in moderation can be beneficial, in too great a quantity can be fatal. Given these aggressive conditions, it is hardly surprising that ‘lock in’ is felt by the individual players. Who can afford to move first?

Well maybe the answer is the clients, but why should they? Some interesting work has been carried out by Zaghloul and Hartman (2003) in which the effect of ‘disclaimer clauses’ in contracts between clients and contractors was studied. These clauses are extensively used in traditional and new partnering style contracts to shift risks to the contractor on issues such as delay and uncertainty of work conditions. The study was based on a survey of more than 300 industrialists in North America. It revealed that contractors assess the five most commonly used of these clauses such that a premium of between 8% and 20% is added to their price in a seller’s market. This is a very clear and tangible measure of the significant cost of risk within construction relationships. Interestingly, the authors found that low levels of trust were typical, but that where a high level of trust did exist the impact on the premiums was profound. The premiums in these circumstances were ‘very low’ because the perception of the shift in risk was from around 4.4 to only 2.2 (on a five-point scale). The benefits of a high level of trust were found to be facilitated if the parties had previous experience of working together such that they felt the other party displayed competence, integrity and, more generally, a good reputation within the industry. In ideal, but rare, circumstances the risks were intelligently and equitably distributed without recourse to blanket clauses. So, for clients the value of building trust is clear and the route forward through some form of on-going relationship has been highlighted as a significant practical variable.

The consensus from the workshops in five countries was that the key objective was to procure flexibly, optimally and appropriately. This is a complicated way of saying that just using the ‘normal’ approach, because one always does, is not good enough. Procurers need to assess each situation and be flexible enough to establish the optimal approach that is appropriate for the given situation. This will be conditioned by many things, but is likely to take into account the value of long-term relationships. This can be realised through pre-qualification using a range of key performance indicators, which can include the track record or capacity of the players to work well as a team. Selection based on broader criteria than simply price is becoming quite prevalent, albeit in two-stage tendering price is likely to dominate in the second stage.

Partnering/alliancing arrangements are a move in this direction, but a move to less contractual, more fundamental shared social norms, rooted in professionalism and codes of ethics, is an area that deserves more attention. Practical outcomes are likely to be the selection of project participants based on all-round performance, not simply lowest price, and an equitable allocation and management of risk. For this to happen, accessible and appropriate norms, metrics and contracts will be needed. However, it should be remembered that it is quite possible to move too far in the direction of cooperation as the recent problems of collusion, or ‘horizontal integration’, in the Netherlands (PSIBouw, 2004) have illustrated. This issue has also been picked up at the generic management literature in terms of the ‘dark side of close relationships’ (Anderson and Jap, 2005); thus, the emphasis in the title of the section on ‘balance’. It is, however, only really the clients who have the power to shift this balance.
1.2.4. Dynamic decisions and information

In tandem with the above market considerations, there is a need for dynamic decisions and information throughout the building life cycle. Currently, there are huge gaps in the process through which information and understanding are lost at very great cost. Decision-making is undermined and this is compounded by the combative culture of the industry. However, it was clear from the revaluing construction workshops that, without a conducive procurement context, those working at the project level are almost certain to adopt defensive routines that minimise their risk, but close down opportunities to maximise the joint value created. However, once these conditions have been realised in whole or in part, significant progress can be sought through increased integration using ICTs and the adoption of an appropriate team value management (VM) approach. The common theme to these two foci is seamless integration, focused on, respectively, information/technology and people/decisions.

In the area of information and technology, a report by the National Institute of Standards and Technology (NIST) (Gallaher et al., 2004) dramatically highlights the potential for improvement by assessing the costs of inadequate interoperability in the US capital facilities industry. The headline figure revealed is $15.8 billion ‘lost’ every year, or 1–2% of industry revenue. The report covers only commercial, institutional and industrial facilities, but the analysis extends for the whole life cycle, from planning and design, through construction to operations, maintenance and decommissioning. Interestingly, the results indicate that two-thirds of the ‘unnecessary’ costs are met by owners and operators of buildings, whereas architects and engineers are only associated with about a tenth of this impact. The balance of around a quarter of the costs is met by the industry in terms of contractors, specialists and suppliers. The clear implication raised in the report is that ‘interoperability costs during the O+M phase [result] as a failure to manage activities upstream in the design and construction process’ (Gallaher et al., 2004, p. 25). The figures of course also indicate that motivation to move on the issue is skewed in that the greatest potential to change things is in the area where the least cost is experienced. This is an open invitation to sophisticated clients to demand better use of data models so that the downstream benefit can be released.

Briefing needs content as well as a data structure and Horgen et al. (1999) describe a rich, team-based approach to briefing that highlights various challenges, including keeping existing organisational processes ‘unfrozen’ long enough to allow the optimal built solution to emerge. Luck (2002) has worked on a close analysis of the language used during interactions with users in briefing and concludes that ‘design knowledge cannot be completely represented in a prepositional, non-contextual form’ (p. 16). Barrett and Stanley (1999) argue for the necessity of allowing time for trust to develop so that there is time for co-learning through linked processes of disclosure and feedback. So, briefing has to be a dialogue. How extended and open-ended this is will depend on the novelty of what is intended, but also the knowledge, experience and degree of mutual understanding of the main participants. It is, of course, essential that the above is not used as an excuse for procrastination. So defined, the briefing process articulates strongly with the building production phase, which is the next area for discussion.

The benefit of VM in the production phase was often mentioned at the workshops in five countries. However, it is necessary for VM to impact during the whole of the construction process and this is reinforced by Neff (1998) in his advocacy of the STEPS approach, where the usual political, economic, social and technological factors are
supplemented by a demand to find ‘synergies’. Neff’s argument is illustrated by a case study of a complex sub-service project and gives a recommendation that the STEPS factors need to be reviewed and risks managed progressively with clear mitigation measures and controls. It is in these latter areas that the potential for synergies becomes evident, especially as the practical complexities and constraints mount through the project period. In general, little has been said about continuity beyond initial VM efforts fairly early in the project, although many from the design side of the industry see VM workshops as horrendous, destructive events. The challenge must be for VM to become a more natural part of the thinking and practices of those involved, rather than a confrontational, occasional event. Neff (1998) stresses that for this type of joint problem solving to work, good will and trust are demanded.

Clients, by creating the conditions and expectations for regularly returning to refresh the shared understanding of their aspirations, and steering the project against these, can orientate construction activities much more powerfully towards their ends. By insisting on coherent data structures, the information and knowledge so created can be captured for the benefit of the use phase.

1.2.5. Evolving knowledge and attitudes

The workshops in five countries uncovered profound concerns about the workforce available for construction; for example, a trade skill and, looming, age gap; a lack of design and construction management skills; and a lack of top management capacity. In terms of clients there were particular concerns about the industry’s failure to understand them and their lack of ability to clearly express their requirements to the industry. The notion of ‘educating “about” clients’ covers both ends of the relationship. Clients need educational opportunities to be better clients and a client orientation should infuse the development of all construction personnel.

To support the linkage between universities and industry, there should be joint forum/s so that a dialogue can be maintained and a mutual understanding of the participants’ distinctive roles allowed to develop. However, there are very few powerful drivers behind the educational aspect of the picture, but action here is critical to the success of the overall revaluing construction effort. People are the industries’ most valuable raw material. Dainty et al. (2004) go as far as to call the situation in the UK ‘the construction labour market crisis’, which demands collective action. Knowledgeable clients have a key role to play, as does government, as both can use their influence to reinforce the involvement of educational providers in key forums to stress the importance of understanding clients and involve clients themselves.

1.2.6. Awareness of systemic contribution

Clients drive demand for construction and as such aim to enjoy benefits, but also carry some responsibilities. Of course, construction results in physical artefacts and these are typically created in a regulatory context that seeks to ensure minimum standards on aspects of public concern, such as structural stability, health and safety, energy conservation and accessibility. However, beyond these minimum standards there is a potential to create spaces that to varying degrees enhance the quality of life and
The context for innovation

competitiveness of those using the spaces created in terms of physical, functional and psychological effects.

These can be difficult to measure, but there are general studies that provide pointers, for example, in the area of higher education where CABE (2005) provide feedback from case studies of five UK universities and highlight the important design dimensions for the recruitment, retention and performance of staff and students. Interesting differences in views are revealed as staff appear to be more attracted by buildings with a ‘feeling of space . . . aesthetic appeal’, whereas students stress more functional aspects: ‘modern design . . . quality of facilities’ (pp. 46–47). In addition to differing views, there can be conflicting criteria, exemplified in Heerwagen et al.’s (2004) paper on creating collaborative learning environments that concludes that the central dilemma remains that ‘spaces designed to increase awareness and interaction also increase the potential for interruptions and distractions’ (p. 525).

However, a rare and good example of work that does cut a way through some of these issues is provided by Zeisel et al. (2003) in a paper that identifies environment–behaviour links between the design features of care facilities for Alzheimer’s patients in the US and behavioural health outcomes, such as anxiety, withdrawal, depression and aggression. In general, these dimensions of behavioural health problems are seen to recede in the face of design features such as providing for privacy, variability in social spaces, careful (camouflaged) exit design and creating a residential rather than ‘institutional’ feeling environment. There are distinctions to be made; for example, verbal rather than physical aggression appears to correlate with the environmental design. This type of work provides very valuable insights and although it was for a particularly vulnerable group similar, less stark, issues would doubtless translate, say, to the office environment. By supporting such studies clients could create the potential for evidence-based design decisions to meet their needs.

Widening the scope beyond specific organisations, clients have opportunities and responsibilities as built artefacts make major impacts on societies. Issues such as regeneration can transform lives (and property values) when individual developments add up to attractive spaces/areas for everyone. Some are beginning to coin the phrase ‘Urban FM’ to highlight the need to actively manage some of these spaces too, to gain optimum impact. Clients with a focus on property as an investment will be central to the response to wildly varying demographic trends. For example, population growth from 2000 to 2050 is predicted to swing from over +40% in the US to −30% in Russia. Within these figures there are major shifts in the age profile with, in the developed world, an increase in the percentage of the population aged 65 and over from around 8% in 1950 to around 20% in 2020. An ageing population implies different household sizes and adaptations to support the elderly living independently in their own homes. If this is not addressed there are major implications for their quality of life and a large bill for formal health care provision (Lansley et al., 2004). The implications for the built environment are profound, from creating housing of at least the minimum standard for the world’s poor, to adapting the built environment to huge quantitative and qualitative population changes.

Taking the still broader perspective of the planet and environmental issues, the built environment is responsible for consuming 40% of all the raw materials taken out of the Earth’s crust, by weight, 40% of waste streams, and 40% of greenhouse gas emissions (Milford, 2004). These are huge impacts and, of course, there are tremendous opportunities to reduce these impacts by more efficient processes, recycling materials and
A global agenda for revaluing construction

re-use. There are major moves to increase life cycle and embodied energy performance and these should lead to reduced environmental impacts. In almost all cases clients can take a lead by demanding and valuing good practice in these areas; without this, lowest cost will probably drive out change until the situation is so severe that legislation is used to get action.

Construction creates physical artefacts and often the most prominent dimensions of this are the mess and disruption caused during construction and the cost of the works. However, a pervasive stream of soft and hard benefits also flows over the longer term and needs to be better accounted for so that the return on the initial investment can be made more clearly visible. In this connection key gaps that need attention are the creation of a comprehensive framework for these value streams and the clear identification of appropriate ownership amongst stakeholders. This is an area where clients could lead and in so doing shift their investment decision-making onto an improved evidence-based footing.

1.2.7. Promotion of full value delivered to society

There have been many critical reviews of construction in just the UK (Murray and Langford, 2002) and books such as Woudhysen and Aibley’s (2004) ‘Why Is Construction So Backward?’ jump on the critical bandwagon. This is despite evidence to the contrary; for example, a survey by the NRC of major construction clients in Canada (Manseau, 2003), which found 94% were satisfied or very satisfied. Similarly, a survey of 200 clients in the UK (Barrett and Ruddock, 2000) indicated a robust performance, but with room for improvement on the service dimension.

A core debilitating assumption is that the industry is unhelpfully fragmented. However, it is suggested here that the industry is actually highly differentiated to meet the diverse and complex demands placed upon it, and that at a project level the integration effort is generally kept in clear focus. It could be said that ‘single loop learning’, that is pragmatic problem solving to ‘do things right’, on the ground is alive and well. The same cannot be said for longer term company-based innovation or the policy framework within which it is placed. Here ‘double loop learning’ is severely limited by the turbulence of the industry’s workload and the limited resources of small- and medium-sized enterprises so that progressively moving towards ‘doing the right things’ is hard to sustain. If clients can create longer term relationships this situation could be improved. If clients more vociferously backed the industry when it does a good job that too would make a big impact that would have wide-ranging benefits, including an improved self-image of those in construction and greater attraction for high-quality new recruits.

1.3. Conclusions

Clients can have a significant impact, both in relation to their own projects and, for some, as drivers to policy reform shaping the context within which others work. In this latter area, the government has a responsibility as the major client in most countries to use this influence to good effect. But any client can engage with the policy debate and ensure that it reflects the needs and aspirations of users, owners and investors. This
The context for innovation

can happen at a local or national level and will be particularised to the specifics of the sub-sector in question.

To address how clients can act to achieve significant change in their own projects, examples of exemplary practice will be drawn upon that emerged from the workshops (Barrett and Barrett, 2006). It was clear from a cross-case analysis that improved collaboration or innovation alone could have significant impacts reflected in phrases such as ‘all involved gained’ and the ‘system worked incredibly well’. The incidence of these isolated themes was, however, the exception and it was much more common for the examples to display a combination of collaboration, or collaboration and creativity, driven by severe constraints. This seemed to reflect situations where those involved are under great pressure, but through collaboration, sometimes with creativity added in, the challenge was successfully met. Sentiments were expressed, such as ‘the whole team simply pulled together’, ‘the feeling of working in such a way was great’, ‘initiative and energy of colourful and talented builders’, ‘very unusually’ and ‘discarding the traditional approach’. These convey the feeling of strong social bonds flourishing once the stifling limitations of ‘normal business’ were relaxed in the face of extreme demands.

It is interesting to note that in several cases of constraints, a way forward was fashioned by actually releasing a significant limitation, such as taking the second lowest bid on a project that was very high profiled, guaranteeing a minimum price or explicitly taking time out to fully work through the briefing/design issues. Further, it was quite common for projects to have explicit community (intra or extra to the organisation) benefits. So, ‘re-valued’ construction can be typified by projects where significant constraints drive those involved to collaborate strongly, spurring the team to innovative responses that not only triumph against the demands of the project itself, but also impact positively on the community around.

A major aspect within all of this is the role of constraints and the interesting question, in the project arena, as to when is a constraint a positive factor and not a restraining force? The answer would seem to be when it is stated explicitly, clearly and early on. Further, when it is demanding enough to define the project, prioritise and re-orientate behaviour around a super-ordinate goal and provide a clear measure of success. This is aided by a situation where other (less important) parameters are dealt with flexibly so that appropriate collaboration and creativity, both technical and organisational, are facilitated to meet the challenge. In this way, the constraint has provided a clear space to work within and this certainty can clearly be stimulating provided sufficient flexibility with the remaining resources is available. This contrasts with most restraining forces that sap energy and hold back initiative and hamper creativity. Another pertinent aspect is the nature of the constraint itself. Far from being arbitrary, participants clearly understood and accepted the rationale for these restraints, whether social, time related or environmental. Success with such a task is then explicit and the pride of the participants in these projects was clearly evident as they told their stories.

Before ending, it is important to distinguish the differing nature of the two halves of the infinity diagram. The right-hand ‘looking in’ side stresses actions to enhance the performance of the industry and as such to deal with complex issues for which simple, uni-dimensional solutions are not available. Thus, the signature of this half is ‘appropriateness’ or balance, between various factors. What this chapter aims to do is pinpoint the main aspects around which the issues in each area appear to rotate. However, the argument is categorically not that long-term relationships should replace
contracts, that all information should be kept and recycled, or that education and research alone can solve the problems of the industry. Centrally, it is also not arguing for a single monolithic vision for the industry, but rather a vibrant dialogue with energised partners, amongst which clients are a very important player. Some level of coherence and focus is, however, desirable and the schema set out in this paper is a suggested landscape within which, for example, the conflicting views evident in the special volume of papers on revaluing construction (Courtney and Winch, 2003) can be fruitfully pursued and practical actions identified.

The ‘looking out’ half of the diagram is different in emphasis and broadly speaking is underpinned by an argument for looking broadly beyond existing categorisations, mindsets and images. This is evident in the ‘holistic’ area where existing economic conventions are problematic, in the ‘systemic’ area where the accounting of contributions from construction is lacking, and in the ‘promotion’ area where the industry is significantly undervalued, by others and by itself. In particular, the theory and practice of accounting for the value delivered by construction in its fullest sense is a rich vein to be pursued, for example, as has Saxon (2005).

The notion of ‘revaluing construction’ has, through its very lack of definition, allowed a wide range of ideas and issues to be fruitfully connected. Central to the emerging view has been a conclusion that revaluing construction concerns ‘the maximisation of the value jointly created by the stakeholders to construction and the equitable distribution of the resulting rewards’ (Barrett, 2005), or in short ‘creating value for all’. Provided that performance improvements broadly match positive changes in perception, then a virtuous cycle can be expected to operate. However, a concerted effort over a number of years or even decades will be needed to achieve significant and enduring change and it will be essential that clients are intimately engaged.

Notes

[1] For a fuller discussion of the seven areas for change, please see Barrett (2008).

References

The context for innovation


Hendriks, F. (2004) The poison is the dose or how ‘more egalitarianism’ may work in some places but not in all. The European Journal of Social Science Research 17: 349–361.


