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## **VALUES AND VALUE – TWO PERSPECTIVES ON UNDERSTANDING STAKEHOLDERS**

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### **ABSTRACT**

Whilst most teams understand that delivering value is the key goal of a project or business, many do not have structured ways to make explicit and measure aspects of value that go beyond functionality and cost. The aim of this paper is to present Value in Design (VALiD), a new approach to help project teams identify and maintain a value delivery culture. A value framework is outlined that could help stakeholders articulate, in a structured way, their values and judgements of value by consistently stimulating their discussions during project activities to express and agree stakeholder priorities and expectations. Ultimately it is hoped that project teams will critically appraise their own approaches to determine whether they are successfully integrating stakeholder values and value in their design delivery processes. VALiD (see [www.valueindesign.com](http://www.valueindesign.com)), has been developed by Loughborough University and adopted by Constructing Excellence in the UK as an approach to move away from a short term cost focus to a broader stakeholder view. It equips construction teams with a cultural toolkit, that can be customised and integrated with other methods that address more objective time, cost and quality criteria, to enable them to better understand stakeholders' value judgements as they are framed by values and beliefs.

### **1. THE CHANGING CULTURE OF UK CONSTRUCTION**

The new millennium coincided with the reappraisal of value in UK construction and calls from a wide range of influential individuals, professional institutions and government bodies that the industry must deliver greater value. Design has been identified as an aspect of construction that has been unacceptably compromised by the 'least cost' approach taken by the UK Construction Industry (Construction Task Force 1998; Strategic Forum for Construction 2002). Given its importance in improving quality of life, the Government are clear on the need for change: "... good design provides a host of benefits. The best-designed schools encourage children to learn. The best-designed hospitals help patients recover their spirits and their health. Well-designed parks and town centres help to bring communities together." Department for Culture Media and Sport (2000).

Today Governments are making much clearer statements of their values priorities and are eager to demonstrate value against them. The Office of the Deputy Prime Minister (2005) identified the need to understand the diverse values and interests of particular areas and places in the delivery of the sustainable communities planning policy statement. In the schools white paper choice, fair admissions, parental support, personalised learning, diversity and fair access are defined as guiding principles, DfES (2005) and in the Urban White Paper DETRA (2000) attractive, clean and friendly urban environments that promote enterprising and innovative cultures are identified as critical to success.

The Royal Institute of British Architects sees design providing fundamental ways for humans to realise their values, gain a better quality of life and enhance individual and social well-being, Worpole (2000). Worpole calls for better ways of understanding what is important to people and societies before solutions can be designed to fit their specific values, needs and expectations. He calls for ways, beyond the aesthetic, to design spaces and places that instil in people a greater feeling of safety and security, enjoyment and sense of identity and so give them a better quality of life. Social scientists and philosophers have, unbeknown to many construction industry professionals, used values to acclaim or condemn buildings for many years. The philosopher Roger Scruton, when talking about the Tellick Tower, a social housing high rise built in the 1970's, said that it was 'a contemptuous conception of life's values', because it conflicted with the way people wanted to live their lives, Merrick (2004).

If the UK Construction industry is going to achieve its mission "to realise maximum value for all clients, end users and stakeholders and exceed their expectations through the consistent delivery of world class products and services." (Strategic Forum for Construction 2002) organisations must start to understand how they can build customer-oriented cultures. The CEO of Microsoft in New Zealand (Peat 2003), says companies that can focus on defining value as customers do, designing offerings based on what customers value, and measuring performance in terms of the value that customers experience will be well on the way to creating successful customer relationships.

The construction industry needs to engage stakeholders in a dialogue of value delivery to understand what they need from their products and services. The content of any dialogue must extend the investigation of business or functional need as practiced today (Thomson et al. 2003) to expose stakeholders' values as understood from their language, attitudes and behaviours. Values frame peoples view of everything in the world, and as such will help construction professionals understand what is expected of them and how they can ensure the delivery of value.

Rather than a team approach to value, disciples have built their own understanding of how it is defined and delivered. All construction disciples, who pride themselves on professionally delivering construction solutions on behalf of their customers, may have conflicting views. Designers may be guilty of thinking they are the single best judges of value and so select building solutions against their own values, without a full understanding of all customers' priorities and expectations; Quantity Surveyors, while understanding detailed elemental cost break downs, may eliminate costs without a clear understanding of associated stakeholder benefits. Project Managers may

quickly arrive at design solutions by minimising stakeholder involvement and Engineers may search for a functional solution, without an understanding of how they could achieve or even exceed stakeholder expectations. Clients may seek to reduce design spend and objectively specify design requirements that act as a constraints and limit design creativity. Whilst Value Managers may limit their definition of value to objective and functional criteria, eliminating more subjective cultural factors that define the very nature of the people affected by the project.

This paper helps address the recommendations made by Saxon (2005) that the construction industry needs to:

1. develop a vocabulary of value and quality and a toolset of methods to enable the elicitation of stakeholder values;
2. to educate the industry and its customers in the provisions of value through setting out a skills agenda to inform employers, educators and the relevant learning and skills councils;
3. and develop means to engage stakeholders in the assessment of design activities so that value can be efficiently delivered and monitored.

## **2. VALUES AND VALUE IN CULTURAL THEORY**

Many authors over the past sixty years have emphasised the importance of shared values in creating successful business cultures, a view that still persists today. For example Peat (2003) stated 'Companies which are most successful over the long term are those which incorporate their cultural values at the core of their everyday business operations'. It is Peters and Waterman (1982) who are perhaps the most well known for emphatically pronouncing shared values as the core of excellent corporate cultures, however according to Swindler (1986) the idea of shared values driving action is derived from Talcott Parsons who substituted Max Weber wider conception of human beings as "interest maximizing actors" being driven by material and ideal interests, and replaced it with his concept of global shared values.

Sociological ends or core values play a large part in defining culture, however it is important not to forget that the diverse stakeholder interests and influences, historical, environmental and political social contexts and organisational practices such as: symbols, heroes, organisational structures, control systems, rituals and routines, and stories and myths (Hofstede 2001; Johnson 1992; Swindler 1986) also play a part in identifying culture. A concept that has received much attention in the literature on human values is behaviour (the enactment of appropriate actions, that accord with values). This concept is explored by the authors in future papers, however critically it is often only through the enactment of words that people start to build trust in one another and see the frequency with which value is delivered. What is interesting in the study of organisational cultures is that we can in-part understand both values and behaviours using the same universal values structure. What this paper presents is an approach that provides project teams with an ongoing understanding of the complex trade-offs between stakeholders' values and engages stakeholders in value dialogues in which stakeholder and project value priorities inform decision making. We postulate that a value dialogue on a project will have both a structured and unstructured form. The structured form, presented in this paper, comprises a language

and a framework. The unstructured form will comprise a common knowledge and culture, shared between individuals and organisations.

Some may argue that language reform is superficial and cosmetic, and may have no impact on the real behaviours of people that form a culture. However knowledge about language enables people to make more informed choices and as such by changing peoples language we can change a culture. However given that people filter new ideas and concepts through what they already know, existing values act as a constraint in the adoption of anything new. Mutual understanding is created through language, it broadens choice and gives people confidence to talk and act, because people know their ideas will be accepted. Commercially this joint understanding leads to efficiency and effectiveness and reduces anxiety by reducing misunderstanding and ambiguity.

According to Schein (2004) leaders embed their values within a culture because people are guided by what leaders pay attention to, allocate resources to, reward, measure and control. As such this apparatus must be harnessed to ensure that business leaders can deliver and demonstrate corporate ethics. The classic view that the ultimate purpose of a corporation is to make profit for its shareholders is becoming outdated. Stakeholder approaches are providing a major alternative, given the need of today's corporations to act with social responsibility and protect the various rights of all stakeholders. The concept of value provides a useful means of measuring the trade-off between what each stakeholder gets and what they have to give up, and we argue it is essential that project teams understand value from stakeholders' own perspectives in addition to reaching a project consensus (such as in existing value management approaches). Stakeholders can express their "gets" and their "gives" in terms of the benefits they seek from the project, the sacrifices they are willing to make to get those benefits, and the resources they are willing to consume in doing so (figure 1). This is a modification of the definition presented by Thomson et al (2003).

$$\text{Value} = \frac{\text{Benefits - Sacrifices}}{\text{Resources}} \text{ related to}$$

Figure 1: Value definition: an equation that demonstrates the value trade-off

Given that values are critical in identifying culture, a systematic means of comparing the values of individuals and organisations is needed to inform values dialogues. Universal values provide such a means and Schwartz is a leading authority in this area. He has carried out the most extensive values survey completed and as such has provided data to separate cultural specific values from universal values. This understanding of 56 comparable and general values, rather than those which are unique and specific, provides the opportunity to compare individuals and organisations. (Schwartz 1992; Schwartz 1994) proposed a five feature definition of values that has gained widespread agreement in the field of human values theory. He sees values as concepts or beliefs that pertain to desirable end states or behaviours. They transcend specific situations, guide selection or evaluation of behaviour and events, and are ordered by relative importance. The universal values model developed by Schwartz from literature and then validated, through use by some 64,000 people,

across 67 countries, from highly diverse geographic, cultural, linguistic and religious backgrounds is applied to construction in this paper.

### **3. EXISTING PRACTICES TO IDENTIFY A PROJECT VALUE CULTURE**

#### **3.1 Value Management**

Value Management has been adopted by some in the UK construction industry as a management approach to realising customer value. Many Value Management practitioners take a functional approach, designed to identify and eliminate unnecessary costs. As such decisions are often made on objective fact finding, with little emphasis on less easily measured subjective cultural factors. A handful of academic authors, such as (Connaughton 1996; Kelly et al. 2004; Liu and Leung 2002) advocate a less strict and softer value management approach, however the pervasiveness of functional methods such as functional analysis, which identifies concise criteria expressed as an active verb and noun, prevail. Such methods largely strip away the subjective humanistic values that provide the design team with a cultural context. For example a value criteria, expressed in a stakeholders own words as "somewhere to sit outside, and freedom to sit close to friends", may be modified and defined as the project value criteria "provides outdoor seating". The later provides a designer with far less direction than the former which allows them to think specifically about how the value 'freedom' of a user can be realised through the design of outside places. A project vision or mission is often used as a starting point in defining a value tree using functional analysis; however this would not capture the specific ends in the case above.

One of the major deficiencies with the application of Value Management over the past 40 years has been practitioners' push to reach a consensus view of value rather than allowing different stakeholders with diverse needs to express their various interests and values. As such the process can arrive at an objective consensus view with few subjective values being expressed. Added to this is the fact that people will often find values difficult to express, in particular within group situations. It is unlikely that values will be exposed through value management workshops without concerted effort, time and the use of a highly skilled facilitator and scribe who can elicit and record them.

#### **3.2 Vision and Missions**

Project visions and missions are abstract statements of a project's purpose which stems from the key motivating essence of the clients' values system. According to Johnson and Scholes (2002) the project mission is the overriding purpose in line with the values or expectation of the stakeholders. Mission statements are invaluable in capturing, in a clear, short and inspiring way the core purpose of an activity in achieving its vision (the ultimate picture of excellence and an aspiration for the future). Once an appropriate project Mission has been defined it is then the role of the project leader or champion to continually articulate the mission (and what this means given the resource envelope), to infuse it into the project throughout the value delivery lifecycle.

A project mission or vision may be too abstract to allow for the translation of the value culture into a design solution. A project vision statement is often the only subjective definition in a design brief, however this abstract description will usually represents a top down corporate view, rather than representing the hearts and minds of the broader employees and stakeholders.

### **3.3 Initial Client Briefing**

Client project briefs, or outcome specifications as they are sometimes referred, are often written by a small client team and specify functional outcomes and design requirements. This team is well placed to understand the relationship between stakeholder benefits as they trade-off with project costs. They have a large influence over the design process, and may objectively express product requirements stated as compliance criteria. As such the project mission and project objectives in the brief are often the only subjective expressions of the value culture.

The criteria contained within a client brief are often expressed as outcomes to be complied with to ensure a fundamental level of project success, and as such these objectively stated criteria might not inspire a unique and culturally specific design solution. These documents may contain many detailed criteria that have not been prioritised to show their relative importance and the extent to which a criteria can be realistically delivered to a given cost. As such the design team may be left to make their own decisions on what is most important for inclusion or exclusion as framed by their own value systems rather than those of the users who's views may matter most.

### **3.4 Design Review Process**

Through the briefing process the design team will often build a tacit understanding of the personalities and culture of different stakeholder groups from their meetings with them. Stakeholder values may be elicited and captured as design requirements or in the selection or prioritisation of particular valued means or ends. Designers often talk of their time with stakeholders giving them a feel or sense of what is required. This feeling is an intuitive approach to understanding the values or value drivers to reflect in their design solution and much of the designer's time in upfront design is in encapsulating these in their spatial design solutions. Highly experienced design teams, who have previously delivered specific building design solutions, will be skilful in realising project value, however may not have an awareness of all stakeholder views or a design rationale that can be quickly and simply translated to designers down the supply chain.

Values often remain implicit, because people find them difficult to express and understand. As such it is likely that values will not be effectively exposed without a concerted effort and understanding from the brief taker or Architect. Because values identification does not go on in any formal way, the values exposed may not be the most important to the group or the individual expressing them. Architects may, without an understanding of the effect of their own values, overemphasise those that are important to them, rather than to the project. Opportunities to realise particular values may be missed as design decision making evolves ahead of stakeholder engagement. The communication of values down to the supply chain may be poorly executed because values and value are not fully understood.

### **3.5 Organisational Values Statements**

Values statements demonstrate the broader goals that should direct business strategy. They define what is most important or highly prioritised by an organisation. Brainstorming is often used to identify values statements, however because of the difficulty in involving large numbers using this approach only relatively small groups of individuals are used to understand the whole culture of an organisation. As a result values are often defined by an executive board with few representatives from the broader organisation.

The values statement identification process is often unstructured, so the range of values is often limited. The values of a small sample group may not be a true representation of an organisations culture or the values enacted in practice through employees' behaviour. What is more, if employees have not been included in the definition process they may not be as motivated and committed to the resulting statements. Values statements are often defined by an organisation, but are rarely considered in a project context due to an absence of tools. As a result the values of the lead client are often substituted to represent those of the project, however all stakeholders may not fully commit or share the motivation for these same statements.

## **4. A FRAMEWORK OF VALUE IN DESIGN**

Before we explain the value framework it is important to distinguish between values and value: as one is not the plural of the other. Values are the guiding principles held by people. Value, on the other hand is a judgement of something as framed by a persons values.

The VALiD Value Framework defines the broad concepts that may help the industry better understand, define and deliver value in its broadest sense. This framework has been developed to structure and stimulate design dialogue between customers, designers, contractors and other stakeholders. By exposing the values, needs and expectations of individuals. It is hoped that this dialogue will build trust by helping project teams understand each other and agree satisficing projects objective and product solutions, Simon (1957).

Identifying value and values does not automatically produce a value culture. However if stakeholders are engaged in the design process they may be more likely to be aligned and committed to the guiding principles for the project. The Value Framework presented in this paper provides a common language that will aid an organisational or project to build a value culture, where people have greater understanding of each other and are equipped to build consensus, achieve compromises and mitigate conflicts during design and project delivery.

The Value Framework in Figure 2 seeks to help stakeholders identify an appropriate value culture by:

- Facilitating a dialogue on stakeholders' needs and expectations
- Agreeing a shared project purpose based on the values of key stakeholders and aligned with the values of the broader stakeholders
- Aligning the values of the project with the business strategy and objectives of the client organisation



The Value Framework has three parts. The first involves a method to help organisations reveal and explore their values, based on the work of Shalom Schwartz. The second allows each stakeholder group to define a unique set of criteria and the third uses these definitions of value to subsequently measure performance. This paper concentrates on the first two parts which contribute to the identification of a value culture, rather than the third which maintains the value culture by validating the value definition and assessing value in the emerging design decision making process.

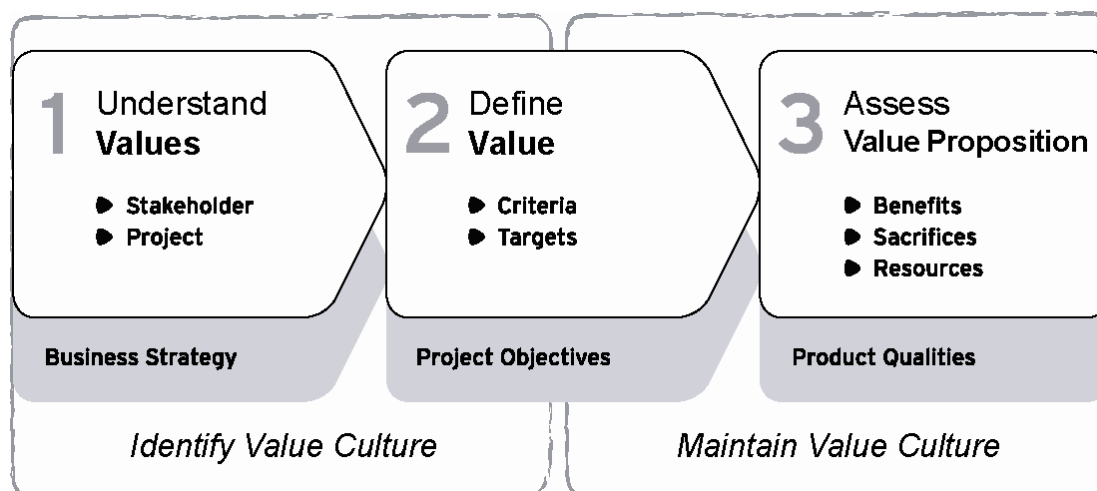


Figure 2: Value Framework to identify and maintain a value culture

#### 4.1 Understand Values

The Value Framework attempts to describe the structural nature of the relationship between values and value. In the first “Understand Values” step of the framework are six potential levels of values: societal, industrial, organisational, professional, project and individual, Devine-Wright et al (2003). However, we are particularly concerned with the content and relationship between organisational and project values. Organisational values describe the culture of a particular stakeholder group that has formulated a specific strategy, while project values are the shared guiding principles agreed by all project stakeholders. Organisations in a project will come together with other stakeholders such as users and local community members who may have values which are compatible, or potentially conflicting. Given that project success depends on collaborative work and that there is often little time and a lack of skill in understanding cultural similarities and differences before a project, there is a need for a universal language of values to enable people to highlight compatibilities and potential conflicts among values systems. The result may be that the severity of cultural clashes may be reduced.

According to Schwartz, values, approximately speaking, fall into one of ten universal values dimensions that form into a circular values system, Figure 3. As such values form a motivational continuum with fuzzy lines of segregation. When values in the figure are adjacent they are congruent because they share an underlying need or motivation goal; while those which are opposite in the circle conflict, because their underlying motivations are opposed. This Figure is an adaptation of Schwartz own model, which pictures the “total pattern of relations of conflict and compatibility among values priorities”, Schwartz (1992). It is this complex concept of a human values systems that can help individuals understand their own priorities, inform their

interactions with others, and their judgements and attitudes towards almost everything. Whilst for an organisation, this structure provides an understanding of how they can define organisational values and business strategy.

The most basic values relationship is between individual and collective interests, where the attainment of values that serve individual interests are by their nature opposed to those that serve collective interests. This relationship between individualism and collectivism is perhaps the most well known cultural dimension ever conceptualised, made particularly so by Hofstede (2001). At the next level, which segments the ten motivational types into two higher-order bipolar value dimensions are: self-transcendence versus self-enhancement and openness to change versus conservation. In reality people have to prioritise between the values that form their own values systems and balance these with the collective group to which they belong.



Figure 3: A universal values system/structure, adapted from Schwartz (1992)

A values questionnaire is used to capture individual values that can then be aggregated with other individuals into an organisational or project view using simple radar chart illustrations. This approach to capturing and communicating values has proved to be effective at revealing the core cultural aspects of organisations. Its insight was such that it stimulated further industrial participation and research is ongoing. The Collaborative Working Centre used the method to understand their working culture and Currie & Brown, following a case study conducted in their Birmingham office, have adopted the method throughout their UK offices to help new employees understand and develop the company vision and strategy, Zhang et al. (2006). Which much more detailed discussion is presented elsewhere, Mills et al. (2006).

## 4.2 Define Value

The demonstration of stakeholder and project value requires a system of measurement that subjectively allows stakeholders to define and assess value from their own perspective. The VALiD approach asks a stakeholder representative to be responsible for what their group gets (beneficial and sacrificed outcomes) and the resources they give up. To do this they express their groups priorities by selecting value criteria and indicating their groups expectations by defining targets for value delivery. Design teams can then use the overall project value definitions as a guide to direct their

attention and effort to make significant improvements where they are most needed. A periodical demonstration of values and value (against original targets) confirms that the projects direction is right which helps maintain ongoing awareness of the value culture.

In the VALiD approach defining value starts from a generic list of value criteria defined by industry experts using cognitive modelling. 118 generic outcomes were identified (in 25 thematic groups) and 49 generic resources (in 6 groups) for any new project. This generic list is only a starting point. Our most recent work, on a series of education capital projects, demonstrates the anticipated customisation of this model. In an exercise to define a set of criteria specific to education projects and a particular project culture the criteria list was increased from 118 to 239 - 68 new criteria were identified from a review of sector specific literature, 20 new criteria were identified by specific stakeholder individuals or groups and 30 new criteria were identified by a group of facilitators who ran 13 workshops to elicit cultural specific design principles.

In order to simplify and better ensure VALiD's adoption the approach has been adapted in two ways. Firstly, the re-categorisation of the criteria into groupings consistent with the Design Quality Indicator, Gann and Whyte (2003) which is becoming established in the UK construction industry. Secondly, due to the breadth of the value model and need to streamline stakeholders' involvement, an expert group went through an exercise to reduce the number of criteria each stakeholder selected (approx. 60 criteria), according to each stakeholder's role, interest and influence. This implies that stakeholders may not be equally good judges of all criteria. Figure 4, shows the outcome of the exercise in which experts mapped stakeholder and value criteria. It shows which categories are more or less relevant to specific stakeholder group, for example criteria in the project management category are more relevant to providers, whilst those in urban and social integration are more relevant to customer stakeholders.

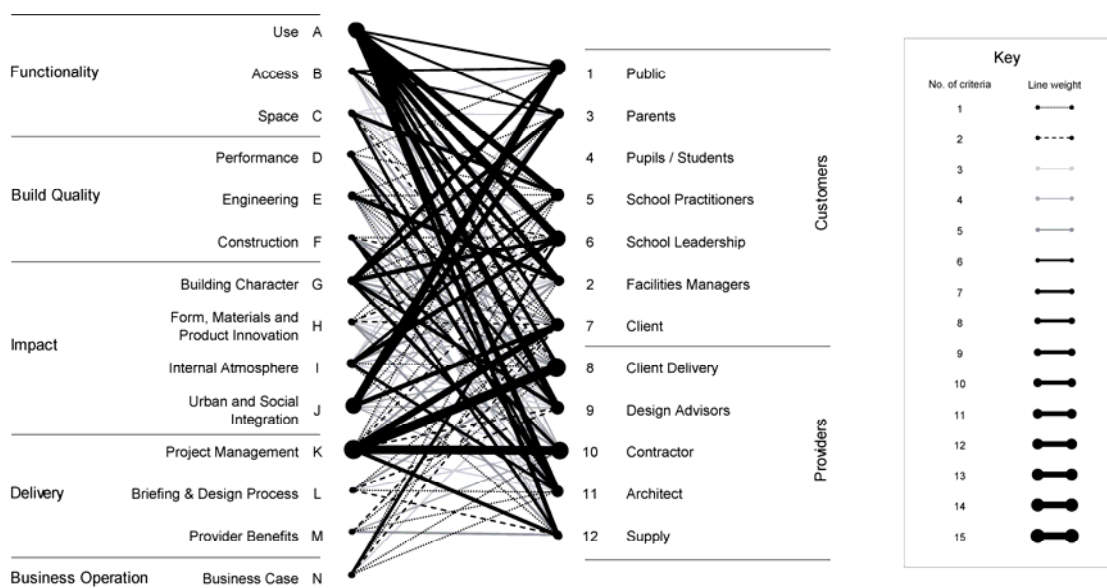


Figure 4: The relationship between benefit criteria in both category and stakeholder groups

Some may argue that this method imposes criteria on stakeholders, however this is not the case. Stakeholders are free to select from a larger list, define their own criteria or customise existing ones.

## 5. CONCLUSIONS

The UK Government have stated clearly the importance of understanding cultural aspects in delivering construction projects; however few structured tools to elicit these subjective criteria go beyond functionality and cost. As such the industry and its customers must further develop tools and skills to enable dialogues centred on the understanding of cultural values and stakeholder value.

VALiD is a new approach that may address some of the key shortcomings of the conventional approaches of the Construction Industry. This paper has demonstrated the application of the framework in identifying a project value culture. The approach contains a suite of simple and practical tool that can be customised to engage and stimulate stakeholder dialogues throughout the design process. Support on the application of VALiD in your organisation or project is available from the authors, while information and case studies are also available at [www.valueindesign.com](http://www.valueindesign.com).

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