Defining

Project Partnering

Authors

**Abstract**

**Purpose –** Due to observed problems in real-life projects stemming from the lack of a unified definition, the purpose of this research is to formulate a new definition of Project Partnering through documenting the specific characteristics researchers attribute to this approach.

**Design/methodology/approach –** Project Partnering definition phrases extracted from a literature review were sorted into a basic framework of 1) who, 2) what, 3) how, 4) when and 5) where. In a web-based survey, a group of experts marked the phrases from the literature review as being specific, generic, or irrelevant to Project Partnering. The expert group comprised highly ranked and experienced Project Partnering researchers. Based on the survey results, a new definition was formulated. The new definition specifies the participants, the objectives and the knowledge, skills, tools and techniques applied to pursue the objectives in Project Partnering. A verification survey of the expert group gave a 78% to 96% combined approve and support score for each element of the new definition.

**Findings –** Project Partnering and a partnering project are defined by a framework encompassing three basic dimensions: 1) participants, 2) objectives, 3) knowledge, skills, tools and techniques applied to pursue the objectives.

The new definition is:‘*Project Partnering is a relationship strategy whereby a project owner integrates contractors and other major contributors into the project. Through commitment to mutual project objectives, collaborative problem solving and a joint governance structure, partners pursue collaborative relationships, trust and improved performance.’*

The new definition indicates that Project Partnering neither varies with early contractor involvement nor gain and pain share, but varies with the degree of mutual project objectives, collaborative problem solving and joint governance structure.

**Originality/value –** Project Partneringis a complex concept with no widely accepted definition. The basic framework applied to the formulation of the definition in this project can also be applied to define and implement a partnering project and to define and distinguish between other relationship-based procurement forms.

**Keywords –** Project Partnering, project management, relationship-based procurement forms

**Paper type –** Research paper

# Introduction

This paper describes the research we carried out to arrive at a new definition of project partnering (PP). Definitions of PP have evolved over time and vary by industry and geography (Latham, 1994, Crowley and Karim, 1995, Construction Industry Institute (CII), 1996, Bennett and Jayes, 1998, Rowlinson et al., 2002, Construction Excellence, 2009, Construction Industry Review Committee (CIRC), 2001, Barlow et al., 1997). The origins of PP can be traced back to 1988 and the US Army Corps of Engineers’ introduction of this management approach and voluntary joint workshops to reduce construction disputes. PP has later been used as a means of achieving continuous improvement (Bennet and Jayes, 1995). Today, PP is considered to be a concept for promoting value delivery throughout a project (Walker and Lloyd-Walker, 2015).

There is currently no widely accepted understanding of PP, and researchers have been unable to form a widely accepted description of PP (Bygballe et al., 2010). The lack of a single accepted definition[[1]](#footnote-1) is also perceived as being one of the major sources of PP implementation problems (Eriksson, 2010, Aarseth et al., 2012). Thus, a new definition should help simplify the complex and multi-faceted nature of PP (Nyström, 2008), mature the concept (Li, Cheng, & Love, 2000) and help achieve greater homogeneity in both implementation and practice (Crespin-Mazet et al., 2015).

A new definition of PP should include all the approaches used in partnering (Eriksson, 2010). Consequently, it should include everything from the philosophy and informal aspects like commitment, trust, good faith to the procedures, processes and tools used to engineer partnering in a project (Bygballe et al., 2010, Lu and Yan, 2007, Crespin-Mazet et al., 2015).

On the basis of this, the research question of this paper is:

R1: What are the specific and definite characteristics of Project Partnering?

The ambition of this paper is to identify any main specific characteristics and properties of PP and express these as headwords in a new definition. To limit the scope, we have not delimited PP from relationship-based procurement forms briefly introduced in the next setion.

# Brief introduction to relationship-based project procurement (RPP) forms

PP is a business-to-business and relationship-based form of procurement in the perspective of the project owner (Walker and Lloyd-Walker, 2015). PP has been developed in leaps and bounds since its introduction (Lahdenperä, 2012), and is emphasising collaboration and coordination (Walker and Lloyd-Walker, 2015) similar to project procurement forms competitive dialogue (Hoezen, 2012), integrated project delivery (Mesa et al., 2016) and alliancing (Walker and Hampson, 2003). Early involvement of key parties, transparent financials, shared risk and reward in addition to joint decision-making are to a varying degree some of the characteristics of the mentioned arrangements (Lahdenperä, 2012).

British Standard BS 11000, which provides a framework specification for creating collaborative business relationships, also does not distinguish between approaches and settles for every relationship having its own unique considerations (BSI, 2010, BSI, 2011).

We will now, based on this context, explain the research methodology used in this paper.

# Materials and research methods

This research searched for a uniform way of defining a partnering project and to formulate a new definition of PP. We first carried out a literature review and broke down existing PP definitions into characteristics of the who, what, when, where, why and how (5W1H) framework. The framework facilitated a group of PP experts, as a competent group, to identify specific characteristics for PP. The basic 5W1H framework is applied in business research to determine the objectives of project business cases, continuous improvement (kaizen) and quality management (Nedyalkov, 2010). The ‘why’ for the five dimensions is covered separately in the discussion section of this paper. The who, what, how, when and where of the basic framework has been applied to the analysis of the literature review, results and discussion.

## Literature review process

The literature review process consisted of several stages. In the first stage, we selected the search keywords ‘project partnering’ and closely associated concepts such as ‘strategic partnering’ and ‘alliance partnering’. We searched using these keywords by publisher on J Stor, Taylor & Frances Online, American Society of Civil Engineers ASCE Journals, Wiley-Blackwell, Elsevier, Emerald ProQuest and Google Scholar. A total of 267 books, reports and research papers on partnering projects were identified in the search. Literature found on the legal and contractual aspects of PP were not included in the analysis, leaving 45 sources cited in this paper. 60% of the literature referred to the construction industry. Definitions and definition-like descriptions of PP were then extracted from the literature sources identified directly and indirectly during the search.

|  |  |  |
| --- | --- | --- |
| Journal, search engine, books | Number found | Cited in this paper |
| International Journal of Project Management | 26 | 3 |
| International Journal of Managing Projects in Business | 24 | 2 |
| Engineering, Construction and Architectural Management | 14 | 0 |
| Construction Management and Economics | 8 | 3 |
| Project Management Journal | 8 | 1 |
| Journal of Management in Engineering | 7 | 2 |
| Journal of Purchasing and Supply Management | 4 | 1 |
| Other papers found on Academy of Management Proceedings, Wiley, Elsevier/Emerald, ProQuest and Google Scholar | 100 | 6 |
| Books and book sections | 57 | 13 |
| Reports, standards and government documents | 19 | 14 |
| Total | 267 | 45 |

Table 3.1 Literature sources

## Survey and verification survey

We asked a group of experts to mark each of the 130 phrases found in the PP definitions extracted from the literature review (see first column of Table 4.2) as being either ‘specific and definitive’ or ‘generic or incorrect’ characteristics of PP. Respondents were also given the option to mark phrases as ‘irrelevant’ and ‘uncertain’. An extract of the questionnaire is shown in Figure 1 below.


Figure 1: Extract of questionnaire

The references for each phrase were listed in Vancouver format on the last page of the questionnaire. The questionnaire also contained open-ended questions that enabled the respondents to provide new alternative phrases, other comments, qualitative assessments, thoughts and feedback.

A total of 367 experts in the three respondent categories were identified by the literature search. We planned to analyse differences between categories, but the low number of respondents does not allow for sophisticated analysis. 76% of the respondents were authors of a paper on PP and institutions providing a definition of PP. The remaining 24% were authors of papers on subjects close to PP. We located 338 e-mail addresses for the experts in our search for their contact information.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|   | No of papers/books | E-mail not found | Sent via e-mail or web page | E-mails rejected | Sent and received | 1st round replies | Verification round |
| Authors (including institutions) of literature providing a definition of PP | 53 | 18 | 35 | 6 | 29 | 7 | 5 |
| Authors of papers on PP | 226 | 11 | 215 | 29 | 186 | 37 | 24 |
| Authors of papers on collaboration projects and similar | 88 | 0 | 88 | 1 | 87 | 14 | 12 |
|   | 367 | 29 | 338 | 36 | 302 | 58 | 41 |

Table 3.2 Literature and respondents

The first round of the survey achieved a 24% response rate from the 29 authors of literature that provides a definition of PP. The response rate for the 186 authors of papers on PP was 20%, and 16% for the 87 authors of papers on collaboration projects. The verification round achieved a response rate of 12% for authors of papers on PP definitions, 59% for authors of papers on PP and 29% for authors of papers on collaboration projects.

|  |  |  |  |
| --- | --- | --- | --- |
| **Groups of respondents** | **Invitations sent and not rejected due to incorrect e-mail address** | **Replies in first survey round - identification of specific and definite characteristics of PP** | **Replies in verification round – assessment of proposed new definition of PP** |
| Authors (including institutions) of literature providing a definition of PP | 29 | 7 (24%) | 5 (12%) |
| Authors of papers on PP | 186 | 37 (20%) | 24 (59%) |
| Authors of papers on collaboration projects and similar | 87 | 14 (16%) | 12 (29%) |
| Total | 302 | 58 (19%) | 41 (13%) |

Table 3.3 Number of respondents, invitations and replies

Indicating respondent quality, 67% of first-round respondents had more than five years of PP experience. The remaining respondents were evenly distributed across the 5-10, 10-20 and 20+ years of experience groups. 79% of respondents had a PhD or higher qualification. Responses were received from Europe, Asia, America, Australia and the Middle East. Respondents classified on average 120 of the 130 characteristics. 41% of the characteristics were classified as specific and definite, 45% as generic and inexact, 7% as irrelevant and 6% as uncertain.

Verification-round respondents could approve, support, be indifferent to, request minor rewording or demand major rephrasing of each element of the definition formulated from the results of the first survey round.

All information was treated confidentially. Data is presented in aggregated form only, and we received the data anonymously. No e-mail/IP addresses, browser information or cookies were linked to responses. Respondents were also instructed to not include any information in their open-ended question responses that could contribute to directly or indirectly identifying them. Permission to collect and store data was obtained from the National Data Protection Authority. This research was conducted in accordance with the national standard code of research ethics and the specific ethical guidelines for science and technology (The National Committee for Research Ethics in Science and Technology, 2008).

## On defining

To define is to explain, to amplify the meaning of and to set limits for a word or concept. *Define* originates from the Latin word ‘definire’ (to delimit or define) and is the root of words such as definition and definitive (Caprona, 2013).

Barnbrook (2002) stated that a definition is used to help people grasp meanings by providing a series of hints and associations that will relate the unknown to something known. ‘Definitions are set out to explain the meanings of certain words in terms of certain other words, preferably in useful natural language.’ (Barnbrook, 2002: 1).

Van de Ven (2007) defined the meanings of terms through using two levels of abstraction: constitutive and semantic definitions. A constitutive definition describes a term by referring to its component parts and therefore defines at a low level of abstraction. A semantic definition describes the meaning of a term through its similarities (positive) and dissimilarities (negative) with other terms, and therefore defines at a higher level of abstraction. Van de Ven (2007) concluded that both positive and negative semantic phrases are required to clarify the meaning of a concept in a semantic definition. Osigweh (1989) clarified this by stating that ‘Terms that are defined by negation are determinate; those defined without negation are indeterminate.’

Our ambition is that this research can lead to the formulation of a constructive definition that defines the specific and definite characteristics of PP at a low level of abstraction. Evaluation of the new constructive definition may provide grounds for adjustment or amendment of the definition components. A negative semantic suffix added to the definition to delineate PP from relationship-based procurement forms that are close to PP may be required to communicate the boundaries of PP. Formulation of a negative semantic suffix, however, falls outside the ambition of this paper.

The first part of the definition formulated on the basis of the survey results describes ‘the general characteristic’ that defines what PP essentially is. The second part characterises the specific and required participators, objectives, means, time frame and type of project. A requirement for the inclusion of the dimensions incorporated into the second part of the definition was that they were marked as 1) ‘required to be included in the definition’ and 2) ‘specific and definite characteristics of PP’ by a majority of respondents. We filled in general language to make sentences complete.

In accordance with Barnbrook (2002), definition evaluation naturally falls into three stages:

1. continuous testing, error correction and enhancement during the development of the language description model and its associated software
2. formal testing to demonstrate the adequate operation of the final version of the software
3. assessment of the implications of the results of stages a) and b) (Barnbrook, 2002).

The research results reported in this paper have been obtained by combining quantitative and qualitative methodologies (Phillips and Pugh, 2010). The PP definition has been derived from survey results by applying theories and methods (Phillips and Pugh, 2010) that extend across PM, PP, research methods and the linguistics of definitions. An inductive approach has been used and the results should provide evidence from which we can draw conclusions.

The results should describe what researchers associate with PP. The semantics of individual words in definitions have evolved over the last four decades. This research, however, searches for a conceptual definition of PP which will provide researchers and practitioners with a current understanding of the term (Sevilla, 1992).

The research philosophy and epistemology are classic positivist (Saunders et al., 2009). What we observe is believed and then interpreted. The focus is on the set of characteristics of PP, showing their properties and the relations between them (Saunders et al., 2009). The web-based survey used a mono-data collection method to provide a snapshot view. Elements of the Delphi method were used as information on the results of the first survey round were shown in the verification survey. With consequences for validity and reliability, the relatively low number of respondents permitted frequency count to be used as the analysis technique.

## Validity and reliability issues

The literature study assessed definitions of PP in papers that were available in electronic format. Two papers were, however, only available in paper format. All literature was provided by the university library. The definition phrases found were manually classified into the dimensions and later verified electronically, still opening for handling errors.

We received 58 usable responses in the first survey round after two reminders had been sent. Responses were on average given for 120 of 130 characteristics. The standard deviation was 28, implying that most respondents replied to all characteristics. The low number of respondents meant that simple data analysis was applied to determine specific and definite characteristics of PP. The characteristics with the highest frequency were then formulated into a definition, which was then verified in a verification round. The low number of respondents prevented sophisticated analysis of variances of groups of respondents, level of experience and region. With respect to reliability, the low number of respondents and the use of frequency count analysis generate uncertainty relating to at which degree the research is repeatable with the same conclusion. Each of the respondents did, however, represent multiple research cases. The respondents who stated their opinion on 130 characteristics of PP have specialised to different degrees in the subject. Thus, we believe that the questionnaire obtained the opinion of qualified respondents. Only researchers, however, were invited to take part in the survey. The findings should therefore be tested, corrected and verified by practitioners.

We believe that the conclusions from the evidence, which are based on observations and form the foundation for the definitions, are correct. The truth of these conclusions is, however, not guaranteed. Sources of error may have crept in during analysis, choice of categories, sorting into categories and overlapping characteristics.

The authors of this paper are not respondents to the surveys.

# Literature review

Partnering definitions are categorised into four types; 1) generic and simple, 2) means focused, 3) component focused including outcomes and 4) component focused excluding outcomes (Eriksson, 2010). Generic and simple definitions such as those provided by Bennett and Jayes (1995), Barlow et al. (1997), Bresnen and Marshall (2000), Cheng and Li (2004), Construction Excellence (2004) draw heavily on the work of the UK National Economic Development Office (NEDO) (1991). A means-focused approach was developed by Chan et al. (2003) stating that partnering is the simple process of establishing good working relations between project parties. Green (1999) adversatively described PP as a propagation through the crude exercise of buying power and the use of seductive rhetoric, control, surveillance and stress. Green (1999), as the only author critical of PP, obviously opposed Bennett and Baird (2001), who tended to highlight positive outcomes and sell the concept. Both means-focused and component-focused definitions mix procedures, tools (e.g., joint objectives and conflict resolution techniques) and outcomes (trust, commitment, openness, etc.) (Eriksson, 2010). The word ‘*trust*’ is actually both an objective (CE, 2009) and a means (CII, 1991, Cowan et al., 1992, Scott, 2001, Chan et al., 2003, Naoum, 2003, CE, 2009, NAEC, 2006, Nyström, 2005, Yeung et al., 2007, Lu and Yan, 2007). Adding further confusion, CII (1991) and Aarseth et al., (2012) stated that ‘the relationship is based on trust’ and hence classified trust as a prerequisite. Means and component-focused definitions neither specify nor link means with participators and objectives. Means and component-focused definitions therefore blur the concept.

The literature review revealed that all the definitions have low levels of abstraction. National Audit Office (2001), (Darby, 2006) and Aarseth (2012) had negative constructive suffixes with antonyms of the components described in the positive constructive element. Authors generally emphasised the undesirable elements of traditional procurement forms and highlighted the potential outcomes of PP (Bennett and Jayes, 1998, Egan, 2002, Latham, 1994). All the definitions failed to set the boundaries of PP, as suggested by Van de Ven (2007).

The following literature review seeks to develop a definition through examining the content of 30 definitions.

## General description

General descriptions of PP were first collated as shown in the table below. The most frequently used phrase for defining PP was the phrase ‘a structured management approach’, used in four of 30 definitions.

|  |  |  |
| --- | --- | --- |
| **Phrase** | **References** | **Number of occurrences** |
| A structured management approach | (Latham, 1994, CIB, 1997, Rowlinson et al., 2002, CE, 2009) | 4 |
| A relationship | (Cowan, 1991, Scott, 2001, Gareis,2006) | 3 |
| A philosophy | (Latham, 1994, CIB, 1997, Rowlinson et al., 2002) | 3 |
| Team-working across contractual boundaries | (Latham, 1994, CIB, 1997, Rowlinson et al., 2002) | 3 |
| A cooperative strategy | (Crowley and Karim, 1995) | 1 |
| A managerial approach | (ECI, 1997) | 1 |
| A management process | (Mosley et al., 1993) | 1 |
| A process | (Barlow et al., 1997) | 1 |
| A procurement route | (CIB, 1997) | 1 |
| A set of strategic actions | (Bennet and Jayes, 1998) | 1 |
| Propagation … and the crude exercise of buying power | (Green, 1999) | 1 |
| A controlled system  | (Bennett and Baird, 2001) | 1 |
| A distinctive practice | (NAO, 2001) | 1 |
| A managerial rhetoric | (NAO, 2001) | 1 |
| A way of doing business | (NAO, 2001) | 1 |
| A sustainable relationship | (ECI, 2003) | 1 |
| A concept  | (Naoum, 2003) | 1 |
| A framework | (Naoum, 2003) | 1 |
| A generic term | (Beach et al., 2005) | 1 |
| A type of collaboration | (NAEC, 2006) | 1 |
| A working relationship | (Lu and Yan, 2007) | 1 |
| A type of contract | (Thomas and Thomas, 2008) | 1 |
| A cooperative governance form | (Eriksson, 2010) | 1 |

Table 4.1 General descriptions of PP

The phrases ‘a relationship’, ‘a philosophy’ and ‘ team-working across contractual boundaries’ are used in three of 30 definitions to describe PP.

## Basic characteristics

The European Construction Institute (ECI), (2003) defined long-term partnering as:

*‘Long-term partnering is .... the development of sustainable relationships between two or more organisations, to work in cooperation for their mutual benefit in the requisition and delivery of works, goods and/or services over a specified period to achieve continuous performance improvement.’*

We will use this definition as an example on how we split the phrases into the basic framework of who, what, how, when and where:

Who: two or more organisations

What: development of sustainable relationships

 mutual benefit

 continuous performance improvement

How: work in cooperation
When: long term

 a specified period

Where: in the requisition and delivery of works, goods and/or services

We note that the example above contains a weak description of participants and means and a contradiction in timeframe. The framework was applied to the definitions harvested from the literature review, as summarised in the table below.

|  (Cowan et al., 1992, Cowan, 1991, UK National Economic Development Office (NEDO), 1991, Construction Industry Institute (CII), 1991, Bennett and Jayes, 1995, Bennett and Jayes, 1998, Naoum, 2003, National Agency for Enterprise and Construction (NAEC), 2006, European Construction Institute (ECI), 2003, Nyström, 2005, Thomas and Thomas, 2005, Gareis and Cleland, 2006, Yeung et al., 2007, International Institute for Conflict Prevention, 2010) |  NEDO, 1991 |  Construction Industry Institute, 1991  |  Cowan, 1991 |  Cowan et al., 1992  |  Latham, 1994 |  Crowley and Karim, 1995  |  Bennett and Jayes, 1995 |  European Construction Institute, 1997  |  Barlow et al. ,1997  |  Construction Task Force, 1998 |  Bennett and Jayes, 1998  |  Green, 1999  |  Scott, 2001  |  National Audit Office, 2001  |  Rowlinson et al., 2002  |  Naoum, 2003  |  Chan et al., 2003  |  European Construction Institute, 2003 |  Thomas and Thomas, 2005 |  Nyström, 2005 |  NAEC, 2006 |  Darby, 2006 |  Gareis and Cleland, 2006 |  Yeung et al., 2007 |  Lu and Yan, 2007 |  Construction Excellence, 2009 |  Eriksson, 2010 |  Int. Inst. for Conflict Prevention, 2010 |  Aarseth et al. ,2012 |  Walker and Lloyd-Walker, 2015 |  Sum markings per row |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Who** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| two or more organizations |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 9 |
| owner or client and contractor |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |
| more than one client, contractor, consultant or supplier |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| stakeholders |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| the owner, designer and contractor |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| a number of firms |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| several firms that can make a significant contribution towards improving the performance |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| representatives of neighbours and special interest groups affected by the proposed work |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| multiple firms and individuals |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| **What - improvement** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| continuous improvement |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 6 |
| improved cost effectiveness |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 5 |
| improve performance |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |
| maximizing the effectiveness of each participants resources |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| improved efficiency |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| maximising effectiveness |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| reducing duplication and waste of resources |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| vast improvements in construction performance  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| real cost savings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| improve building design |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| identify ways of driving out inefficiency |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| continuously improve joint performance |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| improved certainty of time and cost |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| procure works, services, materials or goods, share expertise, promote efficiency and deliver value for money savings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| to achieve something one cannot easily do or chooses not to do alone |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| continuous improvement of quality products and services |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| **What - dispute, conflict and cooperation** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| resolving inter organizational conflict |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| more collaborative relationships |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| minimise the risk of costly disputes |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| collaborative team |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| improved stakeholder involvement |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| trust (as an objective) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| cooperation-based coopetition |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| avoiding conflict |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| **Goals** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| specific business objectives |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |
| increased opportunity for innovation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| client satisfaction |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| success for everyone involved |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| minimise the need for costly design changes |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| focus upon project objectives |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| sustainable development |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| better allocation of risk |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| zero defects |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| mutually beneficent goals |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| **Agreement or understanding** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| Agreement or formal contract |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 5 |
| Commitment or dedication |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 5 |
| based on trust |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| clear understanding |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| signed up through a charter |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| agreed and understood |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| defined by good faith rather than a formal contract |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| motivation ... to collaborate |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| context to collaborate |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| **Decisions** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| co-operative decision-making |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| effective decision making procedures |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| a joint governance structure |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| consensus decision making between teams |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| **Disputes and problems** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| problem resolution methods |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 5 |
| establish procedures for resolving disputes in a timely and effective manner |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| problems are to be resolved collaboratively |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| a methodology for quick and cooperative problem resolution |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ✓ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| dispute resolution procedure  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| conflict resolution techniques |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| **Improvement** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| active search for continuous improvement |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| active search for continuous measurable improvements |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| a culture of continuous, measured improvement |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| benchmarking |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| innovation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| performance measurement |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| replicate good practice learned on earlier projects  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| pragmatic learning in action |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| commitment to be innovative |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| **Sharing** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| pain/gain share scheme |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| introduction of schemes of incentivisation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| win-win |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| sharing the gains |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| reasonable margins |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| open book accounting |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| equitable, win-win relationship |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| mutual economic interests |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| adoption of open book approach to costs |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| transparency and open-book processes |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| compensation form based on open books |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| **Objectives and goals** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| mutual objectives |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 10 |
| shared goals |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 6 |
| a single set of goals |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| **Risks** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| integrated risk mitigation strategy |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| joint risk and value management |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| risk sharing on improvement |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| share risk involved |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| **Measures** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| modifying and supplementing the traditional boundaries that separate companies in a competitive climate |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| seductive rhetoric |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| control, surveillance and stress |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| commitment of senior management |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| creation of sustainable relationships |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| change of culture |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| an authentic leadership style |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| establish and promote a nurturing partnership environment |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| **Measures** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| trust (as a means) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 10 |
| respect |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |
| cooperation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |
| understanding of each other’s individual expectation and values / mutual understanding |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| openness |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| honesty |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| no blame |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| no claims |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| mutual dependence and accountability |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| balance between trust and control |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| common best for project mindset |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| **Measures** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| integrated team-working approach |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |
| substantial co-location / joint project teams |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |
| feedback to project team |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| open communication |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| teamwork |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| to work in cooperation for mutual benefit |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| early participation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| dialogue |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| a joint communication strategy |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| mutual activities |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| workshops |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| teambuilding |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| commitment to excellence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| integrate partners’ standards, procedures, methods and cultures  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| training in co-operative behaviour |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| training in quality, time and cost control procedures |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| training in measuring and analysing processes |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| training in creative techniques to help the search for better answers |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| systematically develops the processes used by project teams  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| strategic teams comprising senior managers from all the firms involved |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| involvement of supply chain  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| bid evaluation based on soft parameters (e.g. technical and managerial competence, collaborative ability, earlier experience of the supplier and shared values) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| changing traditional relationships to a shared culture without regard to organizational boundaries |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| **Timeframe** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| long-term |  |  |  |  |  |  |  |  |  |  |  |  | ✓ |  |  |  |  | ✓ |  |  |  |  |  | ✓ | ✓ |  |  |  | ✓ |  | 7 |
| single project |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |
| multiple consecutive projects |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| a specified period |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| a project, series of projects, or service objectives |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| **Type of project** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| construction projects (including where implicitly stated) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 10 |
| high-risk contracts |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 7 |
| in the requisition and delivery of works, goods and/or services |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| large projects |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| complex and customized projects with high uncertainty and long duration coupled with severe time pressure |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| complex projects |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| any business relationship in a joint project or program |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| **Sum markings per column** | 4 | 15 | 5 | 9 | 7 | 3 | 8 | 9 | 3 | 11 | 19 | 3 | 11 | 20 | 5 | 7 | 3 | 5 | 5 | 3 | 8 | 2 | 5 | 7 | 7 | 21 | 8 | 3 | 13 | 18 |  |

Table 4.2 Basic characteristics of PP

## Literature assessment

Our first finding from this work relates to the suitability of the basic framework of who, what, how, when and where to this research. We found that 127 of the 130 phrases or words in the definitions in the literature review were classified as 1) participants, 2) objectives, 3) knowledge, skills, tools and techniques to pursue their goals (means), 4) timeframe or 5) type of project. This proves that the framework is suitable for further use in this research.

We chose to use the word ‘participants’ for the *who* dimension. It is a more neutral term than ‘partners’ or ‘stakeholders’. The words and terms ‘goals’ and ‘objectives’ (the *what* dimension) are used interchangeably in the literature due to being included in definitions of both PP and PM. An example of this is found in Pinto’s definition of an objective as ‘something toward which work is to be directed, a strategic position to be attained, a purpose to be achieved, a result to be obtained, a product to be produced, or a service to be performed’ (Pinto, 2013). In this paper, goals are defined as being broad statements that apply to a project, and objectives are defined as being specific, measurable, assignable, realistic and timeframe-related statements that support the goal. The *how* dimension (or the means) in PP reflects the knowledge, skills, tools, and techniques as included in the Project Management Institute’s (PMI) definition of Project Management: *‘..is the application of knowledge, skills, tools, and techniques to project\* activities to meet the project requirement.’* The *when* dimension allows a specific PP period to be defined, and the *where* dimension defines the types of projects PP is applied to.

A definition based on the most frequently occurring phrases in Table 4.2 above, and which covers all five basic dimensions, could read as follows:

*‘Project Partnering is a long-term structured management approach whereby two or more organisations commit to mutual objectives, trust (as a means) and joint problem-resolution methods to pursue improved cost effectiveness and continuous improvement in high-risk construction projects’.*

Participators, objectives and means in the definitions in the literature review are inconsistent. The definitions describe a wide range of means, but do not link means to objectives. We were therefore unable to identify specific characteristics of PP from the literature review. We will now proceed to describe the formulation of a definition based on the results of the survey.

# Results

## Survey results

Survey results are presented in the tables below. Phrases that only achieved low scores are not included. The implications of the survey results on definition reformulation are described after each table.

Table 5.1 presents the results for the general description of PP.

|  |  |  |
| --- | --- | --- |
| **What is PP?** | **Number ticked** | **Per cent** |
| A relationship | 35 | 62.5% |
| A cooperative strategy | 35 | 62.5% |
| Team-working across contractual boundaries | 32 | 57.1% |
| A type of collaboration | 31 | 55.4% |
| A working relationship | 22 | 39.3% |
| A cooperative governance form | 22 | 39.3% |
| A philosophy | 21 | 37.5% |
| A managerial approach | 16 | 28.6% |
| A way of doing business | 16 | 28.6% |
| A structured management approach | 14 | 25.0% |
| A type of contract | 13 | 23.2% |

Table 5.1 General description of PP

The responses show that ‘a relationship’ and ‘a cooperative strategy’ achieved the highest scores. The authors chose to proceed with ‘a relationship strategy’. The phrase ‘cooperative’ could be included subsequently in the *how* dimension.

The definition should therefore begin as follows: ‘Project Partnering is a relationship strategy ….’

Table 5.2 below presents the results for the characteristic dimensions that are required when defining, implementing, monitoring and evaluating a partnering project.

|  |
| --- |
| **What are the categories of characteristics required when defining, implementing, monitoring and evaluating a partnering project?** |
| Who are the participating stakeholders | 56% (31) |
| What objectives do the participants pursue | 76% (42) |
| How do the participants pursue the goals using knowledge, skills, tools and techniques (measurers) | 76% (42) |
| When: a specific time frame | 36% (20) |
| Where: a specific type of projects | 27% (15) |
| Other | 0% |
|  | 100% (58) |

Table 5.2 Required basic dimensions

The clear majority of respondents (76%) considered the *how* and *what* dimensions to be required in definitions of PP and of partnering projects. A smaller majority (56%) considered the *who* dimension to be required. Only a minority of respondents (27-36%) considered the *when* and *where* dimensions to be required in a definition. The results for all the five dimensions were verified by a second question in the first survey.

This led to the following development of the definition. ‘Project Partnering is a relationship strategy … how who pursue what.’

We now proceeded to look at the highest ranked *how* dimension and the scoring of phrases relating to whether PP is regulated by agreement or understanding.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Characteristic** | **Specific and definite** | **Generic or incorrect** | **Irrelevant** | **Uncertain** |  **Responses** |
| A commitment or dedication | 60% | 34% | 2% | 2% | 53 |
| The relationship is based on trust | 57% | 37% | 2% | 2% | 54 |
| Clear understanding | 57% | 36% | 0% | 6% | 53 |
| Motivation ... to collaborate | 47% | 44% | 2% | 5% | 55 |
| An agreement/formal contract | 46% | 39% | 9% | 4% | 54 |
| Establishment of agreed and understood … | 42% | 38% | 2% | 17% | 53 |
| Context to collaborate | 36% | 49% | 2% | 11% | 53 |
| Defined by good faith rather than a formal contract | 33% | 39% | 13% | 13% | 54 |
| Signed up through a charter | 31% | 46% | 9% | 11% | 54 |

Table 5.3 Agreement or understanding

Commitment or dedication received the highest specific definition score. The results, however, are quite blurred, an aspect which we will discuss further in the next section. The results and strict compliance with our methodology led to the following expansion of the definition. ‘Project Partnering is a relationship strategy with commitment to how…. who pursue what.’

The means, participators and objectives results are presented in Table 4.4 below.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Group** | **Characteristic** | **Specific and definite** | **Generic or incorrect** | **Irrelevant** | **Uncertain** | **Responses** |
| **Means** |  |  |  |  |  |  |
| Objectives and goals | Mutual objectives | 80% | 17% | 0% | 2% | 54 |
| Objectives and goals | Shared goals | 75% | 21% | 0% | 2% | 53 |
| Trust and attitude  | Understanding of each other’s individual expectation and values/mutual understanding  | 72% | 25% | 0% | 2% | 53 |
| Disputes and problems  | Problems are to be resolved collaboratively | 68% | 26% | 2% | 2% | 53 |
| Decisions  | A joint governance structure | 63% | 29% | 4% | 2% | 52 |
| And the remaining measures  | To work in cooperation for mutual benefit | 63% | 33% | 0% | 2% | 54 |
| Sharing  | Sharing the gains | 62% | 29% | 6% | 2% | 52 |
| And the remaining measures  | Open communication | 61% | 35% | 0% | 2% | 54 |
| Other measures  | Establish and promote a nurturing partnership environment | 61% | 33% | 2% | 2% | 51 |
| Agreement or understanding  | A commitment or dedication  | 60% | 34% | 2% | 2% | 53 |
| Disputes and problems  | Establish procedures for resolving disputes in a timely and effective manner | 60% | 33% | 4% | 2% | 52 |
| Trust and attitude  | Respect | 59% | 37% | 0% | 2% | 54 |
| Trust and attitude  | Honesty | 59% | 37% | 0% | 2% | 54 |
|  |  |  |  |  |  |  |
| **Participators** | Owner or client and contractor | 69% | 24% | 2% | 4% | 54 |
| Participators | Two or more organisations | 62% | 26% | 6% | 4% | 53 |
| Participators | The owner, designer and contractor | 47% | 38% | 6% | 8% | 53 |
| Participators | Several firms that can make a significant contribution towards improving the performance | 47% | 38% | 9% | 4% | 53 |
|  |  |  |  |  |  |  |
| **Objectives** |  |  |  |  |  |  |
| On conflict dispute and cooperation |  More collaborative relationships | 73% | 20% | 2% | 4% | 55 |
| On conflict dispute and cooperation |  Trust (as a goal) | 68% | 25% | 4% | 2% | 53 |
| On conflict dispute and cooperation |  Collaborative team | 64% | 30% | 0% | 4% | 53 |
| On other goals |  Mutually beneficent goals | 63% | 31% | 0% | 4% | 54 |
| On improvement |  Improve performance | 60% | 35% | 2% | 2% | 55 |
| On improvement |  Maximizing the effectiveness of each participant’s resources  | 57% | 33% | 4% | 4% | 54 |
| On improvement |  Continuously improve joint performance | 57% | 31% | 6% | 4% | 51 |
| On other goals |  Focus upon project objectives | 51% | 40% | 4% | 4% | 53 |
| On conflict dispute and cooperation |  Minimise the risk of costly disputes | 46% | 48% | 0% | 4% | 54 |
| On conflict dispute and cooperation |  More collaborative relationships | 73% | 20% | 2% | 4% | 55 |
| On conflict dispute and cooperation |  Trust (as a goal) | 68% | 25% | 4% | 2% | 53 |
| On conflict dispute and cooperation |  Collaborative team | 64% | 30% | 0% | 4% | 53 |
| On other goals |  Mutually beneficent goals | 63% | 31% | 0% | 4% | 54 |
| On improvement |  Improve performance  | 60% | 35% | 2% | 2% | 55 |
| On improvement |  Maximizing the effectiveness of each participant’s resources | 57% | 33% | 4% | 4% | 54 |
| On improvement |  Continuously improve joint performance | 57% | 31% | 6% | 4% | 51 |
| On other goals |  Focus upon project objectives | 51% | 40% | 4% | 4% | 53 |
| On conflict dispute and cooperation |  Minimise the risk of costly disputes | 46% | 48% | 0% | 4% | 54 |

Table 5.4 Means, participators and objectives

Based on Table 5.4 we added ‘mutual objectives and goals, collaborative problem solving and a joint governance structure’ to the definition. We also added ‘project owner, contractor and other major contributors’ based on the results for the *who* dimension. The three top scoring objectives were more ‘collaborative relationships’, ‘greater trust’ and ‘improved performance’.

The scores for the *when* and *where* dimensions being required in a definition were low. This was further reflected in low scores for the phrases describing timeframe (<31%) and type of project (<22%). Consequently, no timeframe nor type of project was included in the definition.

The results for each dimension were compiled to formulate a definition. The readability was improved, and the project owner perspective introduced in Section 2 was emphasized to generate the following definition.

 ‘Project Partnering is a relationship strategy in which project owners integrate contractors and other major contributors into the project. By commitment to mutual project objectives, collaborative problem solving and a joint governance structure, partners pursue collaborative relationships, trust and improved performance.’

This is the definition that was tested in the verification survey.

## Verification survey

The verification survey gave the following results.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **To what extent does each element of the formulated definition match your understanding of PP?** | **Approve** | **Support** | **In-different** | **Suggest minor re-wording** | **Demand major re-phrasing** | **Un-certain** |
| a relationship strategy (65%) | 66% | 22% | 5% | 2% | 5% | 0% |
|  where | 27% | 22% | 39% | 2% | 0% | 10% |
|  project owner (69%) | 44% | 39% | 5% | 7% | 2% | 2% |
|  integrates | 54% | 24% | 12% | 7% | 0% | 2% |
|  contractors (69%) | 56% | 32% | 5% | 2% | 2% | 2% |
|  and other major contributors (47%) | 41% | 37% | 12% | 7% | 2% | 0% |
|  into the project, | 56% | 27% | 17% | 0% | 0% | 0% |
|  by commitment to (60%) | 59% | 22% | 15% | 5% | 0% | 0% |
|  mutual project objectives, (80%) | 71% | 22% | 2% | 2% | 2% | 0% |
|  collaborative problem solving, (68%) | 76% | 20% | 5% | 0% | 0% | 0% |
|  and a joint governance structure (63%) | 49% | 41% | 5% | 0% | 5% | 0% |
|  partners | 56% | 37% | 7% | 0% | 0% | 0% |
|  pursue | 41% | 39% | 12% | 2% | 0% | 5% |
|  collaborative relationships, (73%) | 68% | 24% | 5% | 2% | 0% | 0% |
|  trust (68%) | 56% | 32% | 10% | 2% | 0% | 0% |
|  and improved performance. (60%) | 66% | 20% | 7% | 0% | 5% | 2% |

Table 5.5 Verification survey results

All the words and phrases included in the verification survey achieved a combined approve and support score of more than 78%. This is a high score. The scores have been awarded by very knowledgeable respondents and should therefore represent a solid foundation on which to build a new definition. All comments received after the verification survey are listed in Appendix 1. The results may, however, be questioned, as we will highlight in the discussion section below.

# Discussion

## Summary of findings

Table 6.1 provides a summary of findings during the maturing of the definition.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Definition based on literature review** | **Definition based on literature review and survey** | **Improvement** |
| General description | *Structured management approach* | Relationship strategy | Yes, and may be further improved |
| Participants | Two or more organisations | *Project owner integrates contractors and other major contributors* | Yes, and may be further improved |
| Means | *Commit to mutual objectives, trust (as a means) and problem resolution methods* | *Commitment to mutual project objectives, collaborative problem solving and a joint governance structure* | Yes, on the joint governance structure. Clarification on trust as an objective, not as a means |
| Objectives | *Improved cost effectiveness and continuous improvement* | *Collaborative relationships, trust and improved performance* | Yes, and may be further improved |
| Time frame | Long term | n/a | Yes |
| Type of project | High-risk construction projects | n/a | Yes |
| What PP is not | Descriptions providing neither clarification nor contrast | n/a | Remaining |
| Delineation to other close concepts | Not observed | Not proposed | Remaining |

Table 6.1 Summary of findings

The comments in the verification round indicated that respondents viewed the general description of PP as ‘a relationship strategy’ as being *‘not a very clear term’* (example response). The phrase ‘a relationship strategy’ was selected based on the literature review and the survey results. The British Standard 11000 describes PP as ‘a type of collaborative business relationship’. This, however, includes a contractor’s relationship marketing activities. We believe that adding ‘project owner integrates…’ placed sufficient distance between PP and a contractor’s relationship marketing.

Two professors from Scandinavia with five to ten years of experience independently suggested that we *‘replace strategic relationship with collaborative relationship’.* We decided to keep ‘strategic relationship’ because the word ‘collaborative’ already occurs twice in the definition. This is furthermore in line with BS 11000.

Walker and Lloyd-Walker’s (2015) ‘a relationship-based procurement form’ highlighted PP as an owner’s procurement form. This approach was alsosuggested by *PhD*, Australia with 10-20 years of experience who suggested ‘A relationship-based procurement form’ could be a precise alternative to ‘a relationship strategy’ where combined with ‘project owner integrates…’. However, ‘relationship strategy’ achieved a very strong approve and support score of 88% in the verification survey. We therefore, based on this, chose to continue with ’relationship strategy’.

## Knowledge, skills, tools and techniques specific to PP

The phrase ‘a commitment’ achieved a 60% specific score and ‘an agreement/formal contract’ achieved 46%. This resolves the debate of whether PP is based on an agreement or understanding. There was furthermore strong support for the relationship being based on trust (57%). It is our understanding that trust also reflects ‘commitment’ and provides an explanation of the high scores of both.

The proposed definition does not distinguish between core and optional components, as described by Eriksson (2010). Eriksson found seven core elements. Only one of Eriksson’s core elements (‘joint objectives’) achieved a score in this survey that was high enough for it to be deemed to be a specific characteristic. Another of Eriksson’s core elements (‘bid evaluation based on soft parameters’) was classified as being specific by 34% and as being generic by 49% of respondents.

The core element ‘compensation form based on open books’ was classified as being specific by 30% and as generic by 46% of respondents. This is, however, a rare characteristic in traditional project procurement. We, however, consider this element to be suitable for use as a specific characteristic for defining collaborative relationship forms that are close to PP.

Start-up and follow-up workshops achieved a 41% specific score, joint objectives an 80% specific score (therefore included in the definition), teambuilding achieved a specific score of 35% and conflict resolution techniques a specific score of 32%.

A PhD from Scandinavia with five to ten years of experience noted that *‘improved project performance is one of the mutual project objectives’* and should thus not be included in the definition. We acknowledge the potential duplication. We nevertheless find it important to distinguish between means and objectives. ‘Mutual project objectives’ is a means for pursuing the objective of ‘improved project performance’.

Joint governance structure and the exclusion of trust as a means are aspects that are not found in the literature review-based definition. Joint governance structure is the element that most strongly distinguishes PP from traditional project procurement. A joint governance structure is a stronger means than even the best joint project mindset and makes PP something more than management rhetoric.

## Objectives specific to PP

Collaborative relationships, trust and improved performance are the objectives that achieved the highest specific ranking in the survey.

Collaborative relationships are, however, not unique to PP. They are also important in traditional projects in which both parties are dependent on the end result. The phrase could be made more specific by adding the word ‘more’ - more collaborative relationships. We, however, leave this minor detail unchanged.

The specific score achieved in the survey by trust as an objective was 68% and 51% for trust as a means. There are many definitions of trust (Laeequddin et al., 2010). In a business context and for the purpose of this paper, we understand trust to be personal integrity, competence, consistency, loyalty to the project and openness. Vulnerability is a consequence of openness. Trust can also be seen as being a prerequisite, a means and an objective and is therefore very central to PP (Lau and Rowlinson, 2010).

Trust is fundamentally an objective in PP. A minimum level of trust may be a prerequisite for entering into PP. However, trust is a ‘bonding agent’ between collaborating partners and an essential foundation for creating collaborative relationships. It is also vital to the maintenance of the relationship. (Costa e Silva et al., 2012). What trust as an objective actually means in this PP context is still unclear and can be subject of further reseach.

Improved cost effectiveness and continuous improvement are not included in the survey results nor in the definition based on the literature review. Improved cost effectiveness and continuous improvement are, however, included in improved performance. Improved performance also comprises the *quality* and *time* aspects. Trust has endured as a specific PP characteristic as the objective of PP has matured from conflict prevention to continuous improvement and to value creation.

## Who are the participants?

The participant element in the proposed PP definition is the element with most comments.

Three respondents suggested highlighting the equality between participants and eliminating a more active project owner role. ‘Integration responsibility is, to an extent, shared i.e. the contractors participating are also responsible for accomplishing this.’ (Prof, Scandinavia, 10-20 years of experience). Another angle on the total equality of participants was supported by Assistant Prof, Middle East, 10-20 years of experience, who ‘don’t prefer the term contractors as if you outsource something’ and ‘… prefer being neutral such as firms, organizations, vendors, service providers etc w/o referring to the type of structure’. A PhD from Australia with 20+ years of experience suggested a softening of the concept by: '… the project owner or the head contractor may integrate contractors and other major contributors …'.

As stated earlier in this paper, PP is the project owner’s perspective on what suppliers call business-to-business relationship marketing (Evans and Laskin, 1994). This implies that the project owner has a leading role in initiating the partnering project, including in the selection and inclusion of project partners. Implementing the two comments above would continue the confusion brought about by ‘collaborative business relationships’ including both the project owner’s and contractors’ perspectives. Placing greater emphasis on the project owner’s perspective in PP differentiates PP from relationship marketing, which is a collaborative business relationship based on the contractor’s perspective. To integrate in this context means to bring contractors and other major contributors into a position of equal participation in or membership of a project. Thus, we support the inclusion of ‘project owner integrates’ in the definition. Inserting the verb ‘integrate’ implies that the other participants contribute to integration. Willingness to be integrated is, in our view, required for successful integration.

There were two comments relating to specifying or exemplifying ‘other major contributors’. The commentators, however, did not propose alternatives. One respondent proposed to use ‘neutral words such as firms, organizations, vendors, service providers’ for both contractors and other major contributors because ‘any stakeholder is supposed to contribute, when we say contributor it connotes as if there are non-contributors’. Other proposals included changing 'contractors' to 'the supply team’ (Professor, UK, 20+ years of experience), to 'contractors/specialists and, in some cases, interested parties (regulatory, community) …' (PhD, USA, five to ten years of experience) or to ‘project stakeholders’ (PhD, Australia, 10-12 years of experience). We consider 'the supply team' to be a new undefined term. There may, furthermore, be more contributors than suppliers in a project. We furthermore understand 'other major contributors' to include 'specialists and, in some cases, interested parties (regulatory, community)'. We discussed to delete the word ‘major’ to reflect a contributor’s varying importance throughout a project. The project owner, however, expects everyone to contribute to the successful completion of a project. 'Project stakeholders' does not communicate that the project owner is the lead, as concluded above. Stakeholders also includes non-contributors, a group that project owners do not want to be directly involved in the project itself.

There were also two comments on replacing ‘project owner’ with ‘client’ or ‘sponsor’. We are of the opinion that ‘project owner’ implies stronger leadership than a demanding ‘client’ or non-engaged ‘sponsor’. Project owner furthermore achieved a higher score than client and sponsor in the surveys.

Respondents gave a relatively low score to ‘and other major contributors’. This may indicate that the respondents found project owner-contractor collaboration to be sufficient for PP. Thus, the phrase could possibly be modified to ‘and other major contributors’.

We again advocate, based on our research strategy and the strong approve and support score of 78 to 88% in the verification survey, that we continue with ‘*project owner integrates contractors and other major contributors’*.

## Type of project and timeframe specific to PP

It was surprising to find that the respondents neither recognised any particular type of project nor timeframe as being specific to PP. Most of the literature in the literature review relates to long-term construction projects, including oil and gas development projects. The survey results, however, suggest that PP can be applied to any industry, type of project and timeframe. We considered adding ‘… in complex projects’. The number of partners, the joint governance structure and the joint risk mitigation, however, all make PP complex. Adding ‘in complex projects’ to the definition is therefore unnecessary. PP may evolve over time as partnerships mature from being aware of each other, to joint activities and to the sharing of resources. We consequently agree with the majority of respondents that including a timeframe in the definition is unnecessary. This is a new aspect that was not included in earlier definitions provided by Construction Industry Institute (CII) et al. (1996), which distinguished between project partnering for one project and strategic alliances for long-term commitments.

## Delineation of other relationship-based procurement forms

In the verification round, respondents were asked which types of relationship-based procurement are more and which are less extensive with collaboration than PP. The very mixed replies only show a need for better definitions of the other types of relationship-based procurement. Aarseth et al summarised that PP is not a limited partnership, win-lose adversarial problem solving, independent project teams, risk transfer, case development, conflicting objectives and process improvement not worth risk (Aarseth et. al, 2012). This summary is, however, solely a description of what relationship-based procurement is not.

It would be beneficial to add a semantic suffix that delineates the boundaries of relationship-based procurement forms that are close to PP to communicate the boundaries of PP. However, explaining that (for example) a framework agreement is less extensive and that Project Alliance is more extensive than PP does not provide any clarification. Furthermore, any negative semantic that defines PP as being different from traditional project procurement does not provide a definitive clarification. Hence, definition of types of relationship-based procurement by participators, objectives and means is a field for further research.

## Theoretical and practical implications

We would maintain that the contribution of this research work is how to define a partnering project and relationship-based procurement forms. By following the three-dimensional framework, the research community can clarify RBP forms by negations, define other RBP forms and the boundaries between them. Furthermore, application of the three-dimensional framework may be helpful when measuring and defining success elements for RBP forms. In our view, success elements can be defined within a participant, objective and mean taxonomy context.

Based on our findings, we question if the degree of collaboration varies with increasing early contractor involvement and painshare/gainshare incentives. We would question if an even earlier contractor involvement and a higher degree of pain and gain sharing than PP creates a Project Alliance with a higher order of achieved collaboration. As neither painshare/gainshare nor early contractor involvement constitute elements of the new proposed definition, we would argue that the degree of collaboration varies with the degree of mutual project objectives, collaborative problem solving and the joint governance.

Comparable to Abell (1980) on how to define a business as a starting point of strategic planning, the three-dimensional framework derived in this research may prove useful when defining a partnering project . Selecting the participants, the joint objectives and the means serve as a practical tool and the starting point of defining a partnering project.

## Further research

This research furthermore encountered widespread confusion on the relationship-based procurement forms. Hence, there is a need for further research on this and closely related subjects. A delineation between PP and other closely related concepts may therefore lead to the modification of PP basic description, participants, objectives, means, timeframe or a type of project. New research can clarify any required level of mutual project objectives and how problems and opportunities are handled collaboratively. There are furthermore many varieties of joint governance structures (Klakegg et al., 2000), and how are collaborative relationships, trust and improved performance defined in a PP context?

Any definition, to become accepted, needs continuous testing, error correction and enhancement and the assessment of the implications of any changes (Barnbrook, 2002).

# Conclusion

What are the specific and definite characteristics of Project Partnering?

PP and partnering projects are defined by a framework of three basic dimensions: 1) participants, 2) objectives, 3) knowledge, skills, tools and techniques applied to pursue the objectives. The dimensions *timeframe* and *type of project* were found to be not required when defining PP.

This research proposes the following new constructive definition of PP as a starting point for further refinement:

*Project Partnering is a relationship strategy whereby a project owner integrates contractors and other major contributors into the project. Through commitment to mutual project objectives, collaborative problem solving and a joint governance structure, partners pursue collaborative relationships, trust and improved performance.*

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*Appendix 1: All comments in the verification survey of the proposed definition*

1. *‘By commitment to by AGREEMENT’.* Professor, USA, 20+ years of experience.
2. *‘Partnering is form of project governance where client integrates contractors and (list other major contributors) in the project. By...partners establish collaborative relationships and trust. I don't think improved project performance should be included in the definition. It is one of the mutual project objectives’.* PhD, Scandinavia, five to ten years of experience.
3. *‘Replace strategic relationship with collaborative relationship’.* Professor, Scandinavia, five to ten years of experience.
4. *‘project owner/sponsor integrates contractors/specialists and, in some cases, interested parties (regulatory, community) into jointly defining and delivering value(s)’.* PhD, USA, five to ten years of experience.
5. *‘I personally think partnering should be an initiative initiated by the general contractor to improve all Project Management aspects (time, cost quality etc.). By doing this they should aim to offer more value for money’.

‘In many papers the writers primarily focus on explaining philosophical aspects of partnering, like trust, attitude, commitment etc.
The problem is that gives some the idea that the intangible philosophical aspects come naturally, not realizing that is something you need put time and money into it’.

‘So, for the definition of partnering I would suggest to include the mechanics and procedures to come to the means of partnering. This includes workshops, teambuilding, conflict resolution techniques, and other similar tools and techniques to improve and maintain the relationship’.

‘In my opinion, the paper written by Per Erik Eriksson in 2010 brings valuable input on the definition of partnering’. Bachelor*, China with less than one year of experience.
6. ‘*It is my view that it is not only the task of the project owner to integrate other actors to the project. Instead, to an extent the task of integration is shared, i.e. also the contractors participate in accomplishing it. Also I would suggest that the partners pursue improved performance. Trust and collaborative relationships are merely mechanisms to get there*’. Professor, Scandinavia, 10-20 years of experience.
7. ‘*Project Partnering is a relationship strategy where the project owner or the head contractor may integrate contractors and other major contributors (designers, project owner and other subcontractors) into the project. By commitment to mutual project objectives, collaborative problem solving and a joint governance structure, partners pursue collaborative relationships, trust and improved performance’.* PhD, Australia, 20+ years of experience.
8. *‘You cannot define a concept based on outcome. See ‘improved performance’*. Post doc, Scandinavia, five to ten years of experience.
9. *‘Change 'where' to 'whereby'
Contractors to 'the supply team'
Other major contributors will be eliminated
Change 'by commitment' to 'through commitment’’.* Professor, UK, 20+ years of experience.
10. ‘*A relationship-based procurement strategy where the integration of project stakeholders establishes mutual objectives, drives commitment, and develops collaborative problem solving solutions in a trusting environment to improve project performance’.* PhD, Australia, 10-20 years of experience.
11. *‘I don’t prefer the term contractors as if you outsource something. I prefer being neutral such as firms, organizations, vendors, service providers etc w/o referring to the type of structure instead other major contributors again same terms can be used, any stakeholder is supposed to contribute, when we say contributor it connotes as if there are non-contributors’.* Assistant Professor, Middle East, 10-20 years of experience.
12. *‘Where should be irrelevant and the ability and capability should be consistent at all times and in all places’.
‘Objectives are different between organisations and thus balance is more important.
Governance occurs at the contract level and does not necessarily cascade down to relationships and behaviour on the ground’.* PhD, UK, 10-20 years of experience.
13. *‘A ‘relationship strategy’ is not a very clear term. Building (long term) relationships is a means, not a goal in itself. One thing that needs clarifying is whether partnering involves short time (one project) or also long term relationship (across two or more projects)’.
‘Commitment and trust is not something that can be decided - it has to be built. The formulation seems to take trust and commitment for granted. The intention is very good and the definition is not bad’.* Professor, Scandinavia, 10-20 years of experience.
14. ‘Joint decision making, win-win approach’. PhD, USA, 10-20 years of experience.
15. *‘‘integrates’ : I (…) that the owner do more than just integrating. What happens when there are conflicts between the different views of a project. This happens frequently. In this respect, the second phrase provides a better definition of the dynamics of such a relationship strategy. To me, this strategy is about constructing something in a very dynamic approach. So, it requires for the owner a more active role. The mutual project objectives have to be built together’.* Professor, Canada, 20+ years of experience.
16. ‘I believe that the remuneration model is crucial for it to become a true partnering project. It should be a fixed and a variable component which the fixed portion is converted into an amount when you go into phase 2. The variable part is pure net costs. The customer takes more risk but can also use the money in a more value creating manner. Incentive structure is certainly not good for the process. When entrepreneurs risk paying parts of the clients buildings without getting the benefit from the upside (rental income), they begin to take account for it in budgets and then transparency is lost’. Other, Scandinavia, 10-20 years of experience.
1. Neither the Oxford English Dictionary, the Oxford Advanced Learner’s Dictionary of Current English, A Dictionary of Construction, Surveying and Civil Engineering, Building and Construction Terms Dictionary - Beaufort Online, Construction Dictionary and Glossary of Construction Terms nor Dictionary of Architecture & Construction provide a definition of PP or partnering in a project context. [↑](#footnote-ref-1)