A Look at Joint Ventures

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Fluor

The use of collaborations in accomplishing strategic business objectives has grown considerably over the years with two thirds of the business leaders in a Bank of America Merrill Lynch research survey indicating that they had worked closely in collaboration with at least one other organization and 90% indicating that the future depends on even more collaboration.

These collaborations may take various forms and be driven by factors such as:

- Scale
- Complexity
- Access to technology or intellectual property
- Satisfying national or local participation goals.

The use of joint ventures (including special purpose vehicle (SPV) and limited liability company (LLC) structures) is a growing practice in the engineering and construction market, driven by the factors above but also by greater use of alternate contracting and project delivery strategies including design build and public private partnerships. While these joint venture structures are all established for finite objectives, the durations of many of them exceed the lifetimes of many companies.

In order to better understand the performance, challenges and areas of focus joint ventures represent, senior engineering and construction industry executives were surveyed to gain a deeper insight. Participants in the survey came from firms experienced in the use of joint ventures each with varying degrees of policies and practices to support their formation and operation.

This paper summarizes the survey findings and recaps with some thoughts on areas requiring added emphasis or effort.

Survey Demographics

The survey was conducted in January of 2013 among senior executives that had key roles on recent major project joint ventures. These projects included 23 projects and detailed responses from 24 respondents. Projects encompassed the following sectors:

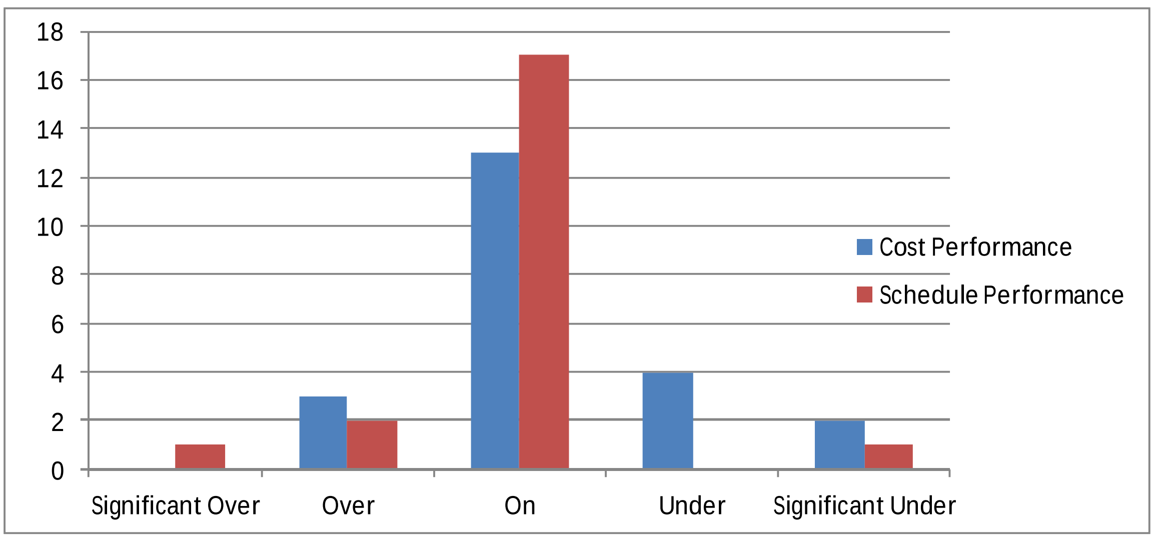
- Power/energy (4)

- Mining (2)
- Gov't Site/Base (3)
- Transportation (11)
- Confidential/ Multi-project (3)

Subsequent to tabulation of the results one additional detailed survey was received and several qualitative inputs received. These are reflected in the narratives discussions and conclusions but not in the statistical compilations. It was judged that the results were not meaningfully changed by these other responses.

Eight (8) projects were undertaken for private sector clients and fifteen (15) for public sector clients. Nine (9) projects were identified as international projects. The approximate average value of the projects for which respondents provided information on total installed cost (TIC) was $2.3 billion and the total sample size exceeded $55 billion.

Project performance is reflected in the following figure and shows a slight bias towards better than targeted cost performance. Approximately 13% of the projects showed poorer than expected cost and schedule performance. Two projects resulted in litigation with the owner.



Projects include PPP, design-build, EPCM, pure construction and asset management.

Respondents included:

- Owner (1)
- Executive level of JV (6)

- JV PM (or Deputy PM) (12)
- JV Project controls (1)
- JV subcontractor (2)
- Sales (2)

Respondent Views with Respect to Owner/JV Partner Relationship

A series of questions were asked to understand JV member's views on the relationship between the project owner and the JV and to understand how this framework might impact overall JV and project performance. The survey form in **Appendix 1** details the specific questions asked.

In almost 40% of the projects the client was viewed as less than fully committed to developing a cooperative relationship with the JV often opting for a full out adversarial relationship from the outset of the project. In many instances this lack of commitment to developing good working relationships manifested itself in other ways including lack of alignment within the owner's organization itself (45%). One of the qualitative inputs subsequently received from an owner, adopted the view that "from a client's perspective, JV's are generally problematic". What is clear from the survey responses is that the owner-prime contractor mode of operation needs to be modified by all parties when the prime contractor is a JV. The attention which must go into JV management cannot come as a result of a diminishment of attention to the client. Conversely, when the JV is working its way through a serious issue, the client must recognize that directly intervening may make matters worse and resolution harder.

Stability of client leadership was also an issue that JV's encountered in 32% of the projects they were involved with and JV's viewed nearly 40% of the projects that they were engaged on as not being ready at the time of their engagement. In over 80% of projects, however, client's had clearly defined and communicated their objectives. There were no control questions in the survey to test whether this varied significantly from non JV projects.

In nearly a quarter of projects, clients did not respect the JV structure, instead seeking to "divide and conquer" the individual partners. This was independent of whether they had adopted an adversarial style with respect to the JV or not. In fully, 35% of projects the client adopted either an adversarial approach to the JV as a whole or a divide and conquer approach with respect to the JV partners. At times this was likely intended to address an issue which the JV had not yet come to grips with but the effect was negative on partner relationships.

Whether the result of weakly founded projects (not ready to go – 40%) or an adversarial approach (35%), JV's judged client decision making timeliness to be lacking.

Equally important to overall JV performance, both with respect to project delivery and JV profitability, was client respect for the contract. Over 40% of respondents described the client's compliance with contract terms as "loosely compliant" with an indication that absolute compliance prevailed only when in the client's interest.

Findings suggest that there is room for improvement in:

- Project formulation, definition and readiness assessment
- Owner organization internal alignment
- Partnering and alignment between client and JV organizations recognizing the special challenges a JV creates
- Governance and decision making processes

Select positive and negative impacts from the client's relationship and engagement with the JV are tabulated below.

Positive Impacts by Client on JV	Negative Impacts by Client on JV
Financial strength	Action/lack of action create financial impacts for project and JV
Planning & management capability	Weak management and inexperienced staff
Commitment and meeting of commitments	Changing objectives
Supported alignment	Lack of alignment (internal, with JV, with stakeholders)
Supported PM teams (owner & JV); let them do their jobs	Interference with PM team; autocratic leadership style
Create required contractual framework	Lack of experience with contract form ; constantly changing commercial terms
Willingness to acknowledged errors in approach	Failure to listen
Proper sharing of risks	Client went beyond contract requirements at closeout
Clear documents	Verbal direction and denials
Good working relationships	Distrust

Problem solving	Interfered causing cost and schedule growth
Decision making	Lack of decisiveness; unpredictability of workload
Shared contingency pool	Late stakeholder agreements

Respondents provided open ended guidance on how to improve JV interaction with clients; lessons learned and recommended features in contracts between owner's and JVs.

Specifically, JV interaction with clients should:

- Ensure effective and efficient JV operations. This included a JV PM with JV experience.
- Ensure alignment of JV partners underpinned by supporting JV agreement
- Focus on deep alignment between owner and JV including recognition of cultural issues
- Engage owner, frequently, above the project team level
- Develop broader, deeper relationships between owner and JV team focused on issue resolution, problem solving and process improvement
- Drive resolution of contractual commercial issues and don't let them fester
- Address JV team and personnel weaknesses and address more quickly

Most important of these based on comments throughout the survey was the criticality of the role of the JV PM. He requires prior JV experience; an ability to be seen by the client and all partners as singularly focused on the JV's success; and the capacity to not only manage client and project team relationships but also those associated with the JV itself.

Respondents were generous in their delineation of lessons learned with respect to improving JV engagement with clients. Many of the lessons learned would be applicable to single entity contracts with a client organization but the multi-party nature of the JV raises some to new levels of importance and adds a dimension of complexity.

- Executive management of JV and client must engage frequently with project team and each other and ensure alignment on strategic business objectives (SBOs) and core values
- SBOs must be clearly communicated at all levels of both client and JV organizations

- Partnering and alignment must be an early, planned, ongoing and significant activity by both client and JV at all levels
- Alignment must include project outcomes, outputs, processes, employment and other policies, and issues important to other stakeholders
- Over communicate – it is never enough
- Deal with the hard stuff – now
- Work at relationships – open, honest, respectful
- JV must work as unified team and engage all JV members in dealing with client. Roles must be clearly understood and agreed to.
- JV must understand client's organization, decision making and approval processes and designated decision makers
- Contract must provide clarity on objectives; required processes or process constraints; acceptance criteria including phased acceptance and any associated incentives; metrics; issue and dispute resolution mechanisms. Importantly, owner's obligations including timely decision making must be spelled out.
- Ensure client and JV each understand the other's commitments (inside, outside, between them) and provide the talent and resources to meet those commitments
- Leadership and competence are respected
- Flexibility should be a contract feature

Suggested improvements to contracts between owners and JVs were numerous, going to many of the issues identified above. Those specific or taking on added importance because of the JV nature of the project execution contractor included:

- Incentives that act to motivate and align JV partner interests
- Better framework for work product re-use and limitations of risks to various JV partners
- Clear definition of lines of communication to JV and constituent team members (don't undermine JV)
- Approval process by owner and JV, including any requisite approvals to bind internal to client and JV
- Shared risk register between owner and JV (and counterparty extension within the JV agreement)
- Required frequency and composition of executive committee meetings
- Limitations on downside risk that reflects "unbalanced" JVs driven by client or national requirements
- Termination clauses to deal with all termination scenarios which may result in different interests by JV partners with respect to the client

Owners need to understand how JVs work and how to best engage with them. JVs represent an added degree of management complexity but it is in an owner's own selfish best interest to facilitate its success.

The second portion of the survey looked specifically within the joint venture and the governing joint venture agreement.

Respondents View with Respect to the JV

Respondent's firms were the managing partner in 40% of the projects in the survey and had an average share in the project gross margin (PGM) of 41%. However, the survey sample showed respondent firms to have led proposal preparation in nearly 55% of the sample, measurably higher than their 40% managing partner percentage.

On average, the joint ventures in the survey consisted of 2.7 partners including the respondent's firm with only 27% of the efforts utilizing formal partnering during the proposal preparation phase.

Respondents described partner alignment and teamwork during the proposal preparation phase. This was then viewed in light of respondent perceptions of subsequent JV performance. In those instances where JV performance was viewed positively, respondents highlighted the following as contributing:

- Strong leadership
- Full engagement of all the JV partners
- Integration and leveraging of the best available talent to create competitive advantage
- Integrated team activities serving as springboard for more formal partnering at the project execution stage
- Extensive formal and informal communication to quickly address and resolve issues

In those instances where JV performance at this stage was viewed more negatively, as indicated by a reluctance or absolute unwillingness to team with a JV partner in a subsequent effort, respondents highlighted the following as contributing to this perception:

- Weak or unclear leadership
- Weak relationships among JV members

- Limited engagement of members of the JV partner staffs (small number; inadequate level of interaction; failing to use best athlete; constantly changing staff)
- Poorly defined process or management of activities
- Major philosophical differences
- Difficulties due to national culture differences

In many ways proposal stage team performance was a leading indicator of ultimate partner perceptions and willingness to subsequently team.

Respondents offered the following comments with respect to major differences between themselves and their partners:

- **Culture** – positively viewed JVs showed strong similarities in culture between JV partners and the respondent firm but this was not universal across all partners and successful JVs. Negatively viewed JVs, however, shared some common characteristics from the respondents perspective:
  - Unsophisticated
  - Not a team player
  - Different risk culture
  - Different contracting philosophy
  - No commitment to safety
  - Weak decision making

  Importantly, no negatively viewed JV was seen to be culturally similar.

- **Ethics** – 90% of positively viewed JVs showed good to strong ethical commitment and traits. Negatively viewed JVs showed a weaker position on ethics including dealings with others 64% of the time

- **Communication style** – positively viewed JVs were typically described as including partners whose communication style was similar to the respondent firm's, open, transparent or proactive. Degree of directness, formality and sophistication were not influencing factors. Negatively viewed JVs communication styles were universally viewed as different than the respondent firm's style and could be characterized as:
  - Uncollaborative
  - Not transparent
  - Unstructured

- **Commercial expectations** – positively viewed JVs were characterized by similar commercial expectations 73% of the time with the balance of JV partner expectations viewed as sub-optimizing profit. Negatively viewed JVs only showed similar commercial focus in those instances where the respondent would consider future teaming under some extreme circumstance. Negatively viewed JVs commercial expectations usually incorporated a weak focus around one the following dimensions:
    - Client service
    - Profit level (associated with assumed risk)
    - Executing the work

- **Risk posture** – differences in risk posture were not significant between positively and negatively viewed JVs. In each instance a partners' risk posture could be viewed as similar or more or less conservative or aggressive. Weak risk understanding was seen in one instance of each view of a JV (positive or negative). An overly aggressive risk posture on safety was highlighted in a negatively viewed JV.

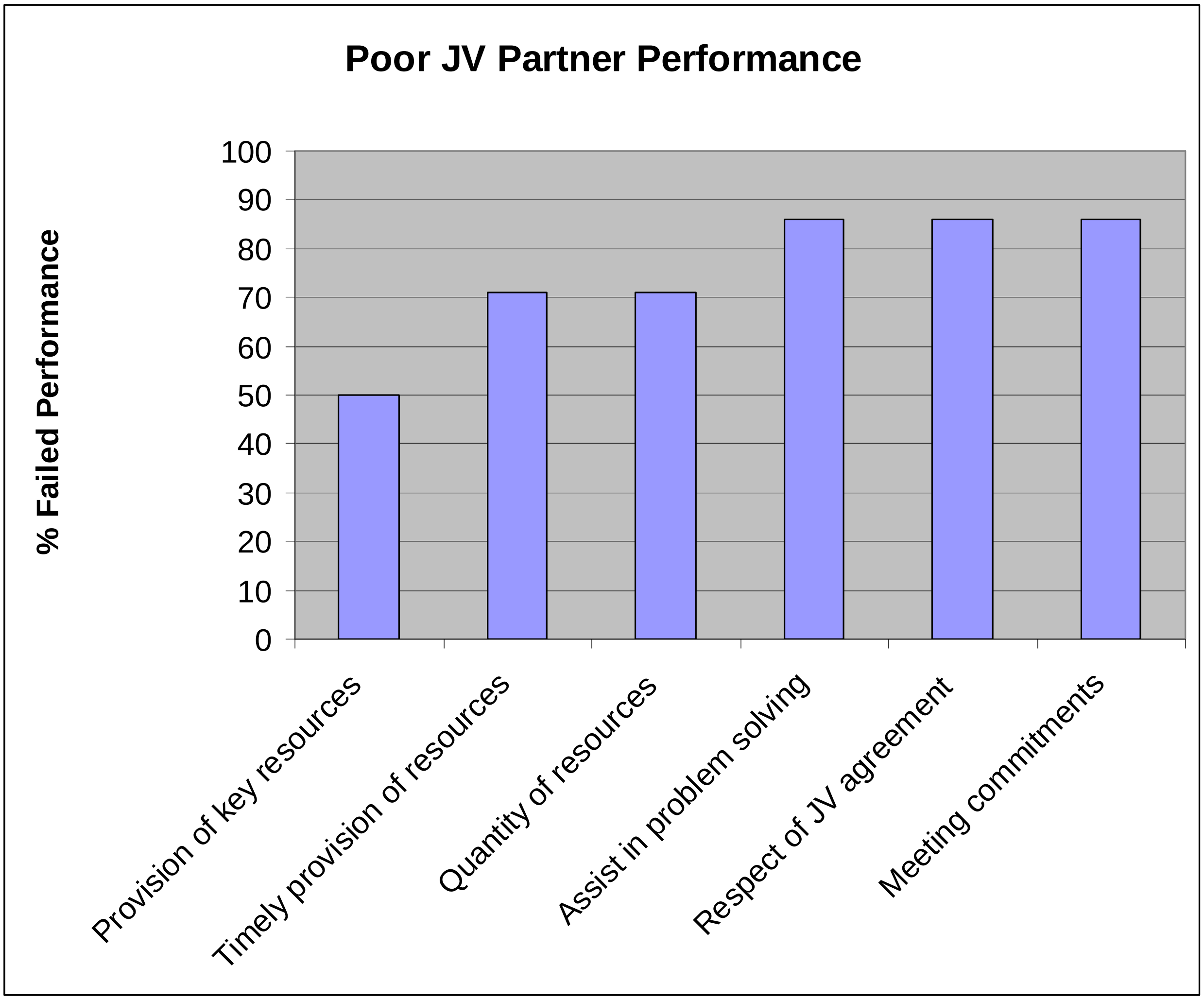
JV partner performance during execution then looked at each of the following factors:

- Provision of key resources
- Timely provision of resources
- Quantity of resources
- Active participation
- Contribution in executive committee meetings
- Assist in problem solving
- Respect of JV agreement
- Coordinated client dealings
- Meeting commitments

Poorly performing partners were characterized by:

- Difficulty in delivering promised key resources
- Timely provision of resources in the quantities required
- Failure to assist in problem solving
- Lack of adherence and respect of the JV agreement
- Failure to meet commitments

The relative strength of these negative characteristics can be seen in the following figure.

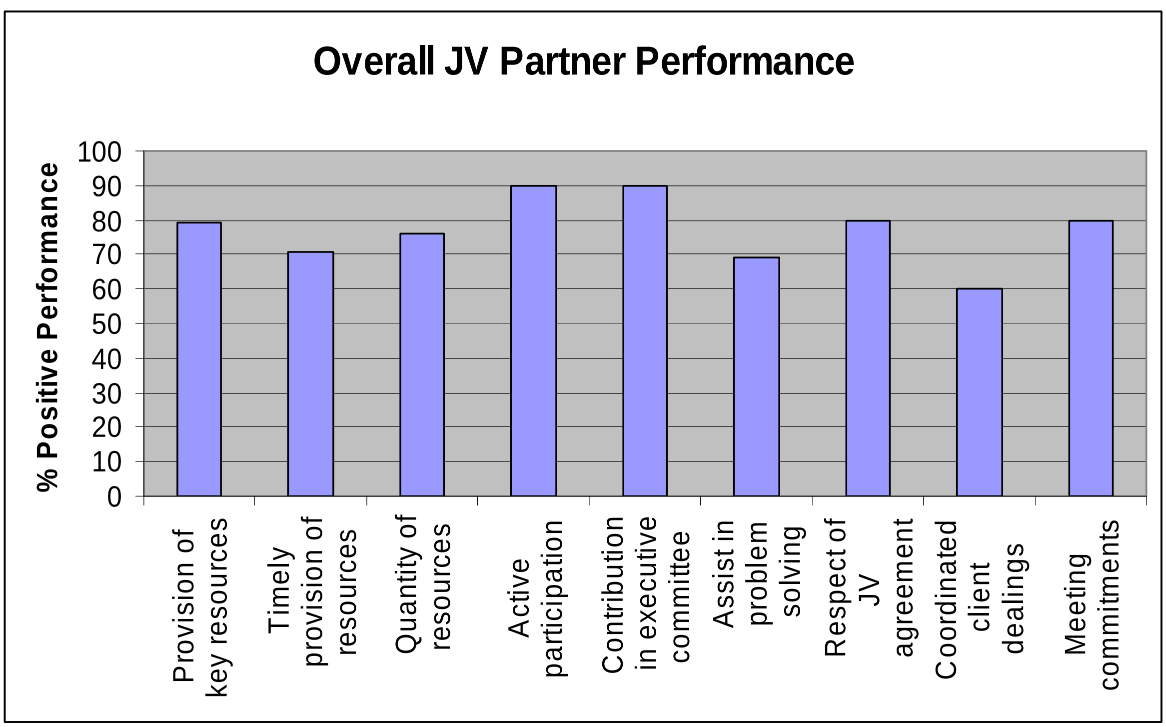


Overall, JV partnerships carry partner performance risks at measurable levels. These risks are associated with both "good" and "bad" partners although some, as noted above are highly correlated with poorly performing and viewed partners. Specifically:

- JV partners fully provided key individuals only 79% of the time. Negatively viewed partners failed to provide key resources nearly 50% of the time.
- JV partners provided resources on a timely basis only 71% of the time. Conversely, negatively viewed partners failed to provide timely resources 71% of the time.
- JV partners provided the required quantity of resources 76% of the time. Negatively viewed partners failed to provide the required quantity of resources 71% of the time.
- JV partners actively participated 90% of the time. There was no difference with negatively viewed partners. Participation was not an indicator.

- Similarly 90% of partners contributed in JV meetings. This was not an indicator of a negative perception of a JV partner.
- JV partners assisted in problem solving and opportunity capture 69% of the time. Negatively viewed partners did not provide assistance 86% of the time. This was a strongly correlated factor in the respondent's view of the JV partner.
- JV partners only respected the JV agreement 80% of the time. In only one instance did a respondent indicate that they would team with the JV partner again in the future given them not respecting the current JV agreement. Failure to respect the agreement effectively eliminates any future efforts together.
- JV partners engaged in independent and uncoordinated discussions with the client over 40% of the time. Mechanisms to provide all JV partners with sufficient client visibility are clearly important and contribute to JV operation and performance.
- JV partners were viewed as meeting their commitments only 80% of the time. In 75% of the instances where partners did not meet commitments this was associated with an unwillingness to team in the future. Continued willingness to team in the future despite failure to meet commitments came with a new recognition of the partners limitations.

Overall JV performance can be seen in the following figure.



The joint venture projects in the survey sample were overall characterized by having stability of project and JV partner leadership 86% of the time. Projects involving negative perceptions of partner performance were seen to lack stability of project (50%) and partner (40%) leadership at much higher than the overall sample rate of 14%.

The degree of integration of staff was highly correlated with the perception of the JV partner. Overall, 77% of the projects integrated the various JV partners to execute the project. On projects involving JV partners with poor perceptions by the respondent the converse was true with 80% of those projects not integrating the JV team.

Respondents provided extensive feedback and suggestions on how to improve project execution through steps that can be taken at the proposal stage. These are summarized in the following table.

Recommended Steps at Proposal Stage to Assure a High Performing JV		
Detailed planning of the JV structure, charter and operation	Clearly defined JV partner roles and responsibilities	Conduct a partner audit to understand strengths and weaknesses
Early determination of “best resources” based on skills and availability	Greater development of relationships at all levels of the JV partner	Clear agreement on managing partner and their JV leadership role
Commitment and engagement of key JV players at the proposal stage	Early, fast tracked alignment using external facilitation at the proposal stage	Project director (and preferably other key staff) should begin JV leadership at the proposal stage
Alignment of success factors for all JV partners	Ensure alignment on financial expectations	Engagement and support by JV corporate executives on partnering
Clarify process for selection and assignment of key staff	Define process for workload balancing between JV partners including provision of necessary flexibility to maximize project performance	Conduct alignment sessions across all project elements including functional and support organizations on the project and in the respective home offices supporting the project
Clear and agreed to client engagement strategy	Establish integrated engineering, construction and estimating team in one location at the outset of the proposal effort	Shared understanding of local regulations, protocols, market conditions, culture and customs.
Ensure necessary level and quantity of experienced personnel agreed to by all partners and a commitment to provide them in place	Ensure assigned personnel are accepted by all JV partners	Ensure common understanding of what the client is saying

Agree that submission of proposal conditioned on effectiveness as a team in proposal preparation	Complete and agree upon the initial version of the project execution plan and project procedures manual	Clarify and agree to any areas of technical or functional leadership that will be the sole responsibility of one partner and ensure alignment with their corporate strengths
Build respect for each partner's strengths (managing partner's role is to draw this out)	Agree on approval authority and process, including requisite partner corporate approvals	Align on core values
Identify project and JV challenges and address these hard issues at the proposal preparation stage	Document proposal stage agreements to avoid later disputes	Over invest in face to face communications
Agreement on HR policies and procedures; work hours and other project affecting personnel policies	Agreement on risk register; contingency; and process to manage contingency	Agree on safety goal and safety management program

Similarly, respondents provided a list of recommended clauses that should appear in the developed JV agreement. These include:

- Governance
  - Exclusivity of the agreement as it relates to all business opportunities within the JV work scope by any of the JV partner's sister companies
  - Agreement on JV Governance structure at the teaming agreement stage
  - Items that require unanimous consent
  - Have an initial set of charters and policies that can be referenced even at the teaming agreement stage
  - Provisions and process for adjustment to the JV agreement if a significant change in actual work scope develops
  - Address potential scope extensions and how they will be handled within the framework of the JV agreement
  - Condition proposal submission on efficiency and effectiveness of the proposal preparation process (demonstrated alignment and teamwork)
- Management
  - Clear definition of Managing Partner responsibilities
  - Approvals and financial commitments matrix
- Risk
  - Mutually understand the risks to be assumed by the JV and each of its members. Ensure that the magnitude of potential shared risk is

understood by all partners (understand consortium or joint and several maximum risk levels)

- HR
  - Common policy on JV staff bonuses to ensure no project level distortions created
  - Partner responsibilities for replacement of personnel they subsequently reassign
  - Personnel selection and hiring process
- Financial
  - JV billing agreement
  - Management partner services included in the management fee
  - Protocol for contingency and profit management
  - Protocol for cash distribution

Respondents subsequently looked at the startup phase of a joint venture executed project and identified a number of challenges and areas of focus during JV startup. These included:

- Be careful of ambitions of key individuals (personality clashes at the leadership level)
- Be cognizant of competing priorities of partners (conflicting business strategies)
- Provide clear leadership
- Reinforce teamwork
- Build a long term plan and keep it current
- Develop a plan to sustain parent company identity for assigned staff
- Ensure parent company care of JV is present
- Utilize project procedure manual development and roll out to align project staff and draw out best practices from the respective partners
- Emphasize alignment activities in safety and procurement areas where significant differences between JV partners frequently occur
- Ensure communication of staff costs including benefit costs that were communicated at the teaming agreement stage continue. Mismatches in salary and benefits can create friction and distortions in staffing unless directly addressed early on.
- Ensure success means the same thing to the entire team and that it has been communicated consistently
- Address cultural issues (both national and corporate)
- Ensure we are speaking to client with one voice or we invite opening the door to a divide and conquer strategy

- Develop a staffing plan including contingency approaches and assign responsibilities (recognize risks inherent in a JV)
- Create mechanisms to ensure all JV partners feel equally engaged
- Comprehensive alignment recognizing the added challenges a JV creates
- Surface any latent partner issues or potential partner related concerns and address directly
- Under estimating startup resources required
- Over committing
- Ensure project team has a common understanding of client, his people, practices and prior experiences of the various JV members
- Test partner commitment early in startup
- Continuously test personnel selections
- Use outside facilitators as part of startup partnering program
- Create open communication and continuous learning environment to break down any barriers between partners
- Understand financial processes and practices of each JV partner
- Finalize management system selection early if not defined in teaming agreement
- Recognize importance of the startup of the safety program
- Address functional systems that typically create challenges – contracts and procurement procedures; IT infrastructure; document control systems
- Focus on trust and relationship building activities
- Clear alignment on project objectives
- Recognize that the biggest communication mistake is the perception that it exists

JV governance efforts typically involve some form of a JV board to address issues that cannot be resolved at the project level or are above the delegated approval authorities. Respondents provided advice in a number of areas on how to make effective use of the JV boards. These included:

- Client
  - Interface with counterpart level in owner's organization
  - Build and nurture client relationships (be very active and engaged)
  - Help build case with client for performance incentives
  - Client executive relationships
  - Act as sounding board for the client
  - Ensure client meeting his obligations under the contract
  - Manage client expectations
  - Executive alignment with the client
  - Establish and oversee client management strategy

- Governance
    - Guidance, expertise, governance, effective decision making
    - Support leadership role of managing partner
    - Validate project vision, strategy and plan and ensure continued validity
    - Approval of any changes to the agreed to project baseline
    - Oversight of project activities
    - Conflict resolution
    - Provide reach back for corporate resources from the respective JV partners
    - Set and enforce agreed to policies
    - Establish team performance metrics
    - Ensure continued alignment of JV partners
    - Evaluation of assumed risks and their management
    - External, owner and JV level "politics"
    - Holding project team accountable
    - Drive top level partner decisions
    - Ensure effective client communications are in place
    - Approvals above project level including obtaining any JV partner corporate approvals
    - Drive team integration and foster trust among staff from various JV partners
    - Provide a structured framework for periodic, scheduled and comprehensive review of project to reinforce project management and discipline
    - Resolution of issues escalated to the JV board level
- Management
    - Ensure client's desired outcomes and strategic business objectives are reflected in project plan
    - Support alignment of client and project team
    - Sounding board and approval body for "extra work"
    - Challenge project team to improve performance levels on both an incremental and breakthrough basis
    - Establish development goals for project team
    - Demonstrate commitment to and importance of safety
- Human Resources
    - Evaluate selection of key project staff
    - Identification of key resources and succession planning

Respondents universally felt alignment around safety was very important to critical for JV effectiveness, Several respondents highlighted the need to go beyond goal alignment ensuring alignment at core values and safety plan level. Several respondents indicated this was a core factor in selecting future JV partners.

Respondents agreed on the importance of having a shared philosophy with JV partners on how to engage with the client during project execution. It was felt that an agreed to approach needed to happen early in the JV process and was particularly important recognizing that client organizations are also frequently fragmented. A couple of respondents felt a much stronger role by managing partners was appropriate with the managing partners setting the tone and others following.

Respondent's views on JV culture exhibited no strong preference with respect to whether a distinctive JV culture should be formed or parent company cultures blended. Respondents did call out the importance of a shared culture on ethics and the importance of the blended or distinctive culture fitting the project circumstance.

Only 70% of respondents felt it was important for JV staff to have linkages back to home office systems and resources. Fully 30% felt that linkage was not important or depended. One respondent indicated it was not desirable.

Respondents felt that home office linkage was accomplished through a variety of means including:

- Home office functional involvement in project set-up and ongoing health checks and training
- Relationship based servant leadership by line and function management
- Alignment on tools and policies at the JV agreement stage and team based training of all partners on use of the systems
- Clear career paths linked with project based succession planning
- Continuous home office communications

Respondents were asked to consider those factors which provided the greatest positive and negative impacts on JV performance. Major performance areas included:

- Communication, led by the JV PM
- Leadership
- Trust and respect at the JV partner level (versus mistrust and competition)
- Early and comprehensive alignment around policies, processes, execution philosophy and approach
- Full use of the strengths of each partner

Weak client performance with respect to meeting contract obligations, timely actions including approvals and weak cash flow all negatively impacted JV operations. This suggests a clear role on the part of the owner in contributing to efficient and effective JV performance.

JV specific execution risks revolved around the adequacy of:

- Governance of the JV (an added management dimension) including timely decision making
- Managing partner leadership and capabilities
- A performance based partnership – integrated and engaged
- A shared risk understanding of all project risks

Risks created for individual JV partners as a result of the JV nature of execution have more to do with not having complete and unilateral control of the project and the ability to act, sole, to take corrective actions. Frequently mentioned risk areas included:

- Loss of control; non performance
- Financial and reputational risks including loss of a strategic client
- Accounting and other controls risks (if not the managing partner)
- Fragmented risk management
- Creating a competitor

Respondents provided a wealth of recommendations on how to improve performance on a JV project. Major recommendations included:

- Early selection of partners you trust with complementary resources
- Follow a structured, robust governance model and align early on it
- Constant alignment, partnering and communication around agreed to baseline, roles, responsibilities, processes and tools
- Strong JV board and PM leadership and commitment with clearly defined roles and delegated responsibilities
- Build the JV leadership team and culture at the proposal stage
- Drive positive team operations through constant communication and have JV board visible and holding people accountable for rules of engagement.

Also of note where suggestions related to:

- Use of external audit of JV governance processes
- Shared risk understanding including risks related to joint project execution and joint and several risks

- Certain key operating procedures related to key personnel rotation and replacement and any adjustment provisions related to non performance by one partner.
- Importance of communicating JV alignment to client and agreeing with the client on how he will deal with the JV

The final questions dealt with tools with respondents generally indicating that right tool selection and continuous improvement of tools was particularly important in a JV environment. The final question focused on one specific tool, a joint venture readiness assessment. A significant number of respondents (33%) had no view on the need for such a tool but 81% of those expressing a view supported development of such a tool. The narratives throughout the survey clearly point to an assessment tool that goes beyond the necessary, due diligence, statutory and management requirements but also focuses on core issues around alignment, governance, culture and communication which are unique in a JV environment.

Some Thought on Areas Requiring Additional Effort

From the surveys received, it is suggested that owner side contracting, management and engagement strategies could benefit from:

- a clearer recognition of the added complexity inherent in a JV
- increased emphasis on agreeing to and respecting communication protocols with the JV
- more comprehensively and frequently engaging with the JV board including in initial and ongoing partnering efforts
- greater acceptance of JV decisions on operating policies, processes and procedures and the associated implementing tools (do not attempt to micro-manage the JV)
- resisting the temptation to directly intervene in day to day JV operations
- ensuring continued alignment of JV partner interests and trust

These are areas where a more robust set of industry best practices are yet to emerge and be broadly adopted.

From the JV side there is a major opportunity to ensure JV success by having:

- a more robust set of governance documents including full JV agreement and various governance practices and process descriptions available in parallel with teaming agreement development

- a clearly defined and robust JV board role defined in the proposal and recognized in the contract with the owner
- the proposal preparation process used as a tool to test cultural and project alignment, being prepared to not submit if misalignment of interests or culture becomes clearly evident
- the foresight to invest in the "soft factors" of project success. These include:
    - formal, third party led partnering at the proposal stage
    - delineation of the PM's added communication responsibilities with respect to the JV board and the various partners
    - "team" based problem solving at the proposal stage to promote alignment and initial JV culture definition
    - trust building activities and exercises
    - open discussion of corporate and national cultures including defining key differences the JV will have to deal with
- visibility and discussion and management of those risks uniquely created by the JV nature

While several of the respondents had well established JV teaming and management policies, these seemed from the included commentary to be focused on meeting statutory and minimum corporate requirements. A readiness index in which a few litmus test elements are included, would likely be beneficial in improving JV outcomes. These litmus test elements would include those highlighted in the survey as highly correlating with negative perceptions of a JV partner or overall JV performace:

- PM inexperienced in JV project execution
- Weak resource commitments during proposal stage including failure to actively engage in problem solving or opportunity identification
- Poorly defined management processes within the JV partner organization
- Major cultural or philosophical difference evident in teaming agreement development or proposal preparation
- Weak ethical positions
- Obtuse communication style
- Hard issue avoidance or deferral (beginning with the teaming agreement)

References

Joint Ventures in the A/E/C Industry – Use and Success Factors; David N. Sillars

Quality Management on Project-Based Joint Ventures; Charles J. "Chuck" Kanapicki

Appendix I

Building a Successful Relationship with Joint Venture Partners

The purpose of this quick survey is to better understand the ingredients to building and sustaining successful relationships with JV partners. After initial survey results have been compiled there may be a second round of questions to dive deeper into what was found from this round of questions.

Please complete one form for each joint venture you have been in a key management role in during the past five years. The multiple columns on the form are included for joint ventures where more than one partner was involved.

Project Name (Generic)	
Owner/Client (Public, Private; US or Non-US)	
Your Personal Role(PM; Eng. Mgr, etc.)	
Project Status (Complete/Ongoing/Litigation)	
Total Installed Cost (TIC)	
Your Company Role	
Schedule Performance	
Cost Performance	
Question with respect to Owner/Client	
Was the client committed to a cooperative relationship with the joint venture or a more adversarial relationship?	
Were all key owner/client functions engaged and reasonably aligned?	
Was there stability in project leadership within the client organization?	
Was the project ready for execution?	
Were project objectives clearly stated and continuously communicated by the client?	
Did the client respect the formal Joint Venture management structure or did he seek to divide and conquer?	
If the approach was to divide and conquer did this persist throughout the project?	
Would you describe the client as being timely in	

his decision making?	
Did the client generally meet his contractual commitments or feel only loosely bound by them?	
What was the greatest positive impact the client had on the success of the JV?	
What was the greatest negative impact the client had on the JV or its performance?	
How could the JV have improved its dealings/relationship with the client?	
What would be the top lessons learned in how a JV must engage with a client?	
Is there any "clause" you would like to see added in a contract with the client to aid in the success of a JV execution project?	

Questions with respect to Joint Venture Partners
(If more than three non Fluor partners answer for the three most significant)

Was Your Company the Managing Partner?	
What % of the JV Project Gross Margin was attributed to your company?	
How many JV partners were there including your company?	
Who led proposal preparation (Your company or Partner #1)?	
Describe JV partner alignment and teamwork during the proposal preparation phase.	
Was a formal partnering session undertaken during the proposal stage?	

	Partner #1 (but not Your Company) (Managing	Partner #2 (but not Your Company)	Non Fluor Partner #3 (but not Your Company)

	Partner and/or Proposal Lead Partner)		
Partner Financial Shares (%)			
For each partner describe any major differences between Your Company and the partners with respect to:			
• “Corporate Culture”			
• “Ethics”			
• “Communication Approach and Styles”			
• “Commercial Expectations”			
• “Risk Posture”			
For each partner, during project execution, did they:			
• Provide the key individuals or equivalent to those proposed			
• Provide resources in a timely manner			
• Provide the quantity of resources required			
• Participate actively in the execution of the project			
• Contribute in executive meetings of the joint venture			
• Actively assist in problem solving or opportunity capitalization			
• Respect the JV agreement and structure			
• Not engage in independent discussion with the client with respect to the project except as			

provided for by the JV agreement			
• Honor all financial and other commitments of the JV agreement			
Would you team with them again?			
Would they likely team with you again?			
Was there stability in JV project leadership?			
Was there stability in JV partner leadership?			
Was there good integration of staff from the various joint venture partners including Your Company?			
From your experience in this JV what would you recommend be done or not done during the proposal stage to assure a successful bid and subsequent high performing JV?			
Are there any “clauses” you would like to see added or strengthened in your JV teaming agreement?			
What special challenges should we be mindful of as we startup a JV project?			
What is effective use of a JV Board (not the day to day project execution team)?			
How important is alignment around safety to JV effectiveness?			
How important is a shared philosophy on engaging with the client during project execution to JV effectiveness?			

Is it important for the JV to develop its own distinctive "culture" or to blend the cultures of the various JV partners?	
How important is personnel linkage back to home office systems and resources?	
How is this best accomplished?	
What had the greatest positive impact on JV performance?	
What had the greatest negative effect on JV performance?	
Did you gain valuable insights and knowledge as a result of executing this project in a JV arrangement?	
What was the greatest risk to project success created by JV execution (vs. prime/sub) of the project?	
What was the greatest risk Your Company faced that was attributable to the JV nature of project execution?	
What are your top 3 recommendations on how to improve a JV project?	
Should Your Company develop better tools or processes for JV project teaming, contracting or execution or should current tools and processes just be adapted on a case by case basis?	
If a new tool or process should be developed what should it seek to accomplish?	
Would Your Company benefit from a JV readiness assessment tool/methodology?	

Thank you for completing this survey. You will receive a summary when it has been fully compiled and analyzed.

About the Author

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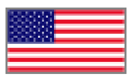

Bob Prieto is a senior vice president of Fluor, one of the largest, publicly traded engineering and construction companies in the world. He is responsible for strategy for the firm's Industrial & Infrastructure group which focuses on the development and delivery of large, complex projects worldwide. The group encompasses three major business lines including Infrastructure, with an emphasis on Public Private Partnerships; Mining; and Manufacturing and Life Sciences. Bob consults with owner's of large engineering & construction capital construction programs across all market sectors in the development of programmatic delivery strategies encompassing planning, engineering, procurement, construction and financing. He is author of "Strategic Program Management" and "The Giga Factor: Program Management in the Engineering and Construction Industry" published by the Construction Management Association of America (CMAA) and "Topics in Strategic Program Management" as well as over 400 other papers and presentations.

Bob is a member of the ASCE Industry Leaders Council, National Academy of Construction and a Fellow of the Construction Management Association of America. Bob served until 2006 as one of three U.S. presidential appointees to the Asia Pacific Economic Cooperation (APEC) Business Advisory Council (ABAC), working with U.S. and Asia-Pacific business leaders to shape the framework for trade and economic growth and had previously served as both as Chairman of the Engineering and Construction Governors of the World Economic Forum and co-chair of the infrastructure task force formed after September 11th by the New York City Chamber of Commerce.

Previously, he established a 20-year record of building and sustaining global revenue and earnings growth as Chairman at Parsons Brinckerhoff (PB), one of the world's leading engineering companies. Bob Prieto can be contacted at Bob.Prieto@fluor.com.