

FRONT-END TRACK

INTEGRATING INFORMATION ON A MEGA PROJECT

- Discussion of common problems related Blackmon to integrating project information and possible solutions to addressing these problems. This will be a highly interactive session and the audience will be asked to share their issues and experience.

Speakers:

- Ted Blackmon Blackmon – Director of Construction Solutions, Bentley Systems
- Ewan Botterill – Technical Director, Intergraph Corporation
- Darryl Coughlin – Workface Planning Manager, Flint Energy Services
- Scott McMorran McMorran – Vice President, JV Driver

Moderator:

- Ric Jackson Jackson – Director, FIATECH

Questions to Panel:

1. Given the economic climate where we are all faced with reshuffling of priorities, has integration and interoperability remained a top priority for your companies and why?
 - Darryl Coughlin – Yes, this is a priority to remain effective. More than ever we need to reduce the overlap in redundancy to contribute to the bottom line. This is a key part of Workface Planning.
 - Scott McMorran – Team of programmers that will tie together our software systems.
 - Ewan Botterill – We need to change the terminology from exchange information to sharing information. We need to handover big items between engineering & operations. We need to sharing information rather than exchanging information. This changes the thinking for contracting strategies. Our main barrier in contract strategy is what is going to be exchanged or should it be shared? We need transitioning from one phase to another. What technologies need to be put in place to make that happen? Am I

getting the specific information that I need – than work back. 10 – 20% technology change & 80 – 90% cultural change. What content is needed and how do we put it into place?

- Ted Blackmon – Data standards like ISO 15926 – what is the key driver of this standard? We need to define the data requirements of what needs to be handed over. We can drive out of each discipline what needs to be driven into FIWP. The lack of purpose is missing. We need the common data and then the order of the data is defined by the WFP process. We need to know what is needed by FIWP development and develop that. Engineering data, scheduling systems, material management systems, quantity tracking systems, RFID information are several types of information that needs to be purposed around WFP. Specifically, data requirements should become standard in contracts. We need to drive this into the contractual process.
- Darryl Coughlin – COAA WFP Committee has discussed the possibility of putting language regarding WFP into contract language. We need to leverage off of the work that has already been done and access information that is already out there.

2. What do you see as the biggest challenge in attaining full interoperability and what specifically needs to be done to achieve it?

- Scott McMorran – Cost is a challenge to sharing information.

3. What specifically can the owners in this room do to support this work and achieve interoperability results for themselves?

- Darryl Coughlin – The trust factor is important. Contractors & engineering houses are hired to deliver a product and they must be trusted to deliver.
- Scott McMorran – COAA is the place to make a change in the culture. Consistency in workplace planning is necessary through organizations and owners.
- Ewan Botterill – It is easy to create a tool but if the information is not used in the tool – the tool is no longer useful. The problem is not that the information can't be shared, it just isn't. Where does proprietary enter the picture? If I release the information, do I lose control of it?

4. What is the role for the supplies community? How, and how well, are they contributing to this effort?

Audience questions:

1. Why isn't information from the project that provided for everyone in the project contained in one spot where the tool can be plugged in? Can the database not be managed with passwords, etc?
 - Ted Blackmon – a distribution framework has to be set up because companies don't want estimating rates shared with everyone. The contractual nature of how a project is set up and the work flow determines what information can & will be shared. A single database will exclude vendors. Project databases can drive the software, but data change control will make or break successful deployment of WFP. Having all software applications tie into one database will corrupt the data fundamentally. Contractual specifications are not determined for sharing & exchange of information. Fundamental exchange of a deliverable (data) must be contractual.
 - Scott McMorran – Accessing isogen files that are put into a spooling program is a problem. Having them released from the engineers would make life so much easier.
 - Ewan Botterill – Exchanging rather than sharing data brings in a liability as to changing the integrity of the information.
2. Whatever technology or contract changes are made, culturally the industry does not want to change. How do you change this?
 - Scott McMorran – We need a standard set of deliverables that are written into contracts.
 - COAA has been working on standard contract language that can be used by industry to start breaking down barriers.
 - Ewen Botterill – There could be participation in Fiotech Big Information Handover Guide. Repurposing information can generally be done during engineering design to use in other parts of the project lifecycle. Construction has not been included in the language as much as engineering & operations.

3. Submit to COAA Board a 2 page request of what kind of language is required in contracts to solve the data sharing problem.
 - There is a standard COAA contract template; however, most owners use their own templates.
 - Ric Jackson commented that it is one thing to say you are going to do something, but it is another thing to do it.
4. Can you get WFP into a project without using a contract?
 - Scott McMorran – This is more of a scope issue, not a contractual issue.
5. Project Managers dictate the business and lawyers write whatever language is necessary to get the business done. Do we really want to put this in the contract? Do we really know what needs to be in the contract?
 - Ted Blackmon – Transform from paper based document transfer to electronic data.
6. Why can't COAA go to an owner building a mega project & demonstrate the principles & ideas we are trying to get in place?
 - Ewan Botterill – If we agree that WFP is good idea, why can't we get past the contract issues, scope issues – why can't we do it? Is cost the issue? Is there not a budget? When does it become viable to be able to afford WFP? Until the last minute?
 - Ric Jackson – Someone has to take on the cost and do it. Clearly it can be done, but it is not being done. Stop pointing and start doing!
 - A non-understanding is part of the problem and the cost is an unknown.
 - Robyn Yaremchuk – Why not a Pilot Project?
 - During the last downturn of economic environment, probably 75% of owners needed to change their contracts by defining what our data & information deliverables were. This area is being explored with COAA defining the contract – what is missing is exactly what the information deliverables are. Technology exists today for bringing multiple disparate databases together without knowing the authoring tool to make key decisions. Technology is there to take unstructured data and put it into structured data.

Summary:

- We have heard from technology developers that the technology is there and they suggest that once they can get the database they can work it. For owners, access to information is critical to the success of the project from beginning to end and will save money. The will is there, the technology is there, commitment & understanding is there – need a tipping point. COAA can come together and speak for owners regarding contract language, etc – tools are there, the money or savings are there and there are some success stories in deploying this process. We could wait for success through evolution or we could start a revolution by doing a pilot project. Take the best owner, best EPC, best collection of software to create a Best Practice. There is an opportunity to take advantage of the wisdom available and go from Evolution to Revolution.