







STREAM ONE - EMERGING ISSUES The Changing Role of Consultants

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Workshop goals:

- To explore issues affecting our profession and
- To identify ways we may evolve to meet the demands of tomorrow









Workshop program:

- 1) Opening remarks
- 2) Round-table discussion
- 3) Report outs









We live in an era of change:

- Project complexity
- Integration of projects
- Alternative delivery methods
- Globalization
- Sustainability
- Demanding clients









As consultants, we must consider skills beyond the technical details:

- Economic
- Political
- Environmental
- Social









Project Complexity

- Increasingly stringent regulations require better informed consultants
- Prepare clients for the future
- Public's interest and influence can add complexity
- Project complexity related to project stakeholders
- Understanding the influences and needs of stakeholders is vital for project success









Alternative Delivery Mechanisms

- Alternative delivery mechanisms gaining popularity:
 - D-B (design-build)
 - B-O-T (build-operate-transfer)
 - Other forms of PPP (public private partnership)
- Owners will want one partner for the whole project
- Consultant expected to take full responsibility for the investment
- Blending of technical roles of the designer and constructor: becoming the Master Builder or Grand Conceptor









Forces Driving the Change: Globalization

- Professionals from different cultural backgrounds and countries working together
- Special skills needed to manage diverse teams
- Increased competition results in fee pressures
- Outsourcing work for lower costs will make quality control more challenging
- Consultants must, as always, also manage technical details and quality under these increasingly complex conditions









Forces Driving the Change: Sustainability

- Sustainable projects focus on improving the quality of life, enhancing the environment, and creating economic opportunities for present and future generations
- Sustainability principles provide for multi-faceted projects that may serve multiple purposes
- Consultants will need to be more creative with their solutions









Integrated Resources Management

- A more holistic view of a problem or challenge that helps to establish viable project goals:
 - Maintain or improve current infrastructure assets
 - Engage all stakeholders
 - Serve present and future needs
 - Address multiple problems simultaneously
 - Utilize creative funding solutions









Forces Driving the Change: Technical Resources

Dangerous convergence of increasing project demands, an aging workforce, and a shortage of technical professionals, which could create serious problems for engineers and consultants— a "perfect storm."









Helping Clients Do More With Less

- Clients want understanding and trusting partner
- Successful consultants will be knowledgeable in project finance, permitting, and operations
- Integrity will be paramount
- Leading consultants will understand owner challenges and work processes
- Consultants will need to be responsive and proactive









The Bottom Line

- The consultant of the future will need to be more than a great designer—technical expertise will be assumed!
- We must be able to:
 - Lead and build consensus
 - Communicate effectively
 - Innovate
 - Manage risk
 - Envision holistic solutions
 - Excel at program management
 - Lead diverse global teams
- Anything less than this and the consultant will not be working for the owner.









Questions to get us started:

- 1. Will the role of consultants fundamentally change? If so, how?
- 2. Should independent advisors be engaged by clients and, if so, under what circumstances? Who will they be? Will we serve in these roles?
- 3. What will consultants do differently in the future and why? Will we have to use engineers differently to meet global needs?
- 4. Will project management be considered an integral part or independent service from consulting engineering firms?