

The Impact of E-commerce. An MPA seminar held at the Institution of Civil Engineers, 1 Great George Street, London, 16 March 2001

MPA events are confidential, although this summary has been compiled so as not to breach confidentiality. Full proceedings and entry to MPA events are available only to members.

Participants

More than 40 participants attended the seminar and the following organizations were represented:

Arup Project Management, Balfour Beatty International, Bechtel, Bovis Lend Lease, British Telecom, British Energy, Brown & Root Services, Costain Group, Electronic Data Systems, High-Point Rendel, International Power Plc, Laing Ltd, Mott MacDonald, Mouchel, National Grid Company, PLC Consultants, PricewaterhouseCoopers, Risk Solutions, Scott Wilson Kirkpatrick & Co Ltd, Sir Robert McAlpine, Thames Water Utilities, Willis Ltd, WS Atkins Rail Ltd, WSP Group Plc

The technology for e-commerce is already with us. Advances in digital computing and communications over the past decade have given us the tools to transform business practices in major projects. Business-to-business (B2B) exchanges are appearing on the scene. What is needed today is belief and commitment in what e-commerce can do for project practitioners.

What areas of opportunity does e-commerce open up? What are the drawbacks and what caveats need to be issued?

E-commercial opportunities

E-tendering

- B2B exchanges are emerging, providing a supplier database and tenders online.
- For suppliers, this means lower marketing costs to reach new customers and to enter new markets.
- For customers, the transaction process cycle is shorter and costs are reduced by—it is said—up to 30 per cent.

E-procurement

- Procurement via online bidding allows the parties to streamline their negotiation processes for materials and subcontract packages.
- This is where the 30 per cent savings are achieved—quality and delivery time are not sacrificed.

Project collaboration

- Online project collaboration, in which an exchange or server acts as a central repository for project information, offers a way forward for the speedy sharing of project data and efficient teamworking.
- Participants may be given greater or lesser access to it.
- Some parts of supply chain are less advanced and are probably not yet ready for it.

Reverse auctions: a few pros and lots of cons

- Short bidding window and prices obtained upfront.
- Process is auditable and transparent.
- Significant savings, e.g. savings of 25 per cent on HVAC procurement reported (but not a trouble-free ride).
- **But** reverse auctions offer best price, not best value.
- Steep learning curve, as subcontractors and suppliers are unfamiliar with e-auctions.



Project collaboration through a project website

- Could discourage reinvestment.
- Concerns raised about later alterations and whether savings will be sustainable.
- In short, the reverse auction, with its cost-based approach, is not seen universally as the way forward. Bearing down on prices is to the ultimate detriment of value.

Reservations and drawbacks

- Systems of e-tendering and e-procurement do not yet offer adequate functionality.
- Problems in putting massive documents and drawings onto the web to aid project collaboration.
- Problems, too, in establishing a repeatable process that can be cascaded right down the supply chain.
- B2B exchanges have potential to restrict, not enhance, competition—legal questions of competition are raised and exchanges will need to be monitored, although two exchanges in other industries (aviation and automotive) have been investigated and passed to trade in the US.
- Concerns about confidentiality and security deterring potential users of online exchanges—safeguards need to be put in place.
- Procurement is a complex activity and online catalogues cannot, at one stroke, provide an electronic substitute.
- First wave of applications in any new move forward may be awkward and contain weakness, but a company looking for edge will probably adopt them anyway.
- Contract negotiations at start of a project too delicate to be concluded digitally.
- E-contractual problems still unresolved: as technology moves swiftly ahead, business models are themselves changing, and the lawyers have yet to deal with the full legal implications.

Opportunities for associated industries

- IT skills shortages: IT recruitment via the web could be improved.
- Provision of IT solutions and information systems to companies.
- Expertise from legal firms who are proactive in this area at a premium.
- Provision of hardware, software, bandwidth and web connections.
- Small companies with IT expertise may find joint venture opportunities with large companies/consultancies.

Final caveat

The rapidity of change is the real threat to the unprepared. If you do not match the speed of what is going on in IT and e-commerce, your company may not survive.