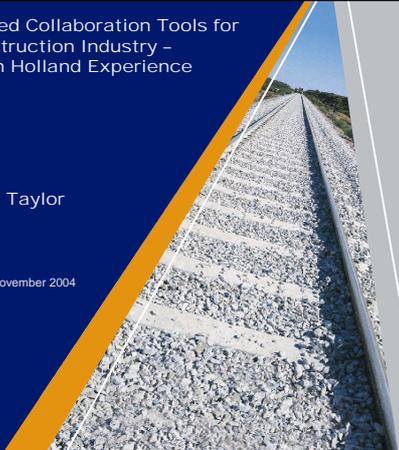


Web-based Collaboration Tools for the Construction Industry – The John Holland Experience



Claudelle Taylor

Thursday, 11 November 2004



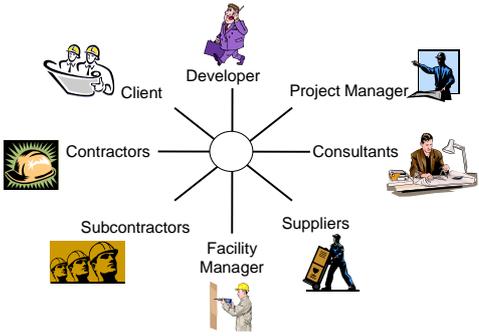
Session Outline



- Background to Web-based Collaboration Tools (Optus inCITE)
- The Applications:
 - Purchasing
 - Tender Management
 - Document Management
 - Portal
- John Holland's Use of Web-based Collaboration Tools:
 - Purchasing
 - Tender Management
 - Document Management
- Conclusion
- Discussion and Questions

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Project Information Interface

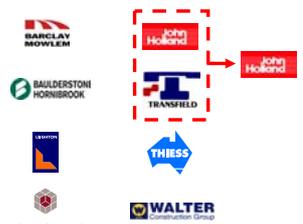



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Optus inCITE



- A neutral construction industry exchange
- Initiated by CITE Australia
- Owned and operated by Optus



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Optus inCITE



- Accessed through a web portal
- There are three initial offerings on the exchange. These are existing applications from three separate providers:
 - Purchasing — **Conexa of New Zealand**
 - Tender management — **EU Supply of Sweden**
 - Document management — **AEC Communications of Germany**
- These applications are integrated within a single portal, designed and implemented by **Hothouse**.



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Purchasing Application



inCITE Purchasing is an on-line purchasing system:

- Issue Requests for Quotations
- Purchase from on-line catalogues
- Individual company price lists and terms
- Orders are subject to approval processes
- Three-way invoice matching
 - (PO, Goods Received, Invoice)
- Auditable trails

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John Holland's Experience with Purchasing

- Supplier adoption process started:
 - Uptake slow: "chicken and egg" situation
 - Identified a pilot project in NSW
- Some cultural barriers:
 - Fear loss of face to face negotiation
 - Prefer to use phone or fax
- Key benefits for John Holland:
 - Reduced administration cost/time and error (application integrated into back-office system)
 - Ordering from pre-qualified suppliers with negotiated prices
 - Adhere to approval cycles
 - Control receipts
 - Keep up-to-date records of commitments
 - Streamline order to invoice processing

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Tender Management Application

- For pre and post award tendering/procurement:
- Tenders or subcontract/supply packages issued
- Tenders submitted or quotations returned
- Tenders or quotations compared, evaluated and awarded
- Multi-tiered:
 - Client to main contractor
 - Main contractor to subcontractors
 - Subcontractor to subcontractors
- Contract management

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Features of Tender Management

- Transfer documents to and from Document Management (inCITE Application)
- Import and export of bills from estimating software
- Electronic break-up of tender documents into packages
- Version control – notification and acknowledgement of addenda
- Subcontractor progress tracking
- Audit trails



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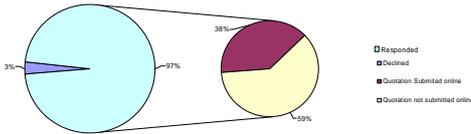
John Holland's Experience with Tender Management (Pre-Award)

- Cultural issues:
 - Subcontractors reluctant to respond on-line
 - Subcontractors not computer literate
- Studied 111 Subcontractors in the Hunter Valley Region:
 - 95.5% had access to or used a computers at work
 - 89.6% used a computer at least once a day
 - 94.3% had internet access at work
 - 89% considered their level of computer experience was at general level or higher (Marriot, 2004).
- Current Status:
 - 10 Tenders

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Online Response to Request for Quotations

Response to Requests for Quotation (Total)



Response Category	Percentage
Responded	97%
Declined	3%
Quotation Submitted online	29%
Quotation not submitted online	29%

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John Holland's Experience with Tender Management (Post-Award)

- All subcontractors participated online
- All subcontractors agreed the system was beneficial:
 - Increased confidence working from controlled documents;
 - Time saved in not having to prepare multiple hardcopies;
 - Deliver responses back to us with ease.

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John Holland's Experience with Tender Management



Key benefits:

- Efficient distribution and control of documents and addenda
- Receipt of quotations in a consistent format
- Efficient analysis and comparison of quotations
- Direct transfer of selected prices and details to the main tender or subcontractor
- TIME SAVING

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Document Management Application



- On-line management of documents, drawings, and all types of communication
- A collaborative communication platform
- Manages workflows within and between stakeholders including review and approval process

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Features of Document Management



- Provides a single platform and repository for all project communication and documents, for all stakeholders
- Highly configurable
- Maintains a clear record and auditable trail of all transactions
- Delivers reliable version control of documents whilst maintaining a full history
- Provides structured and automated workflows including distribution, approval and review processes
- In-built viewer capable of reading multiple formats
- Task-based calendar
- Accessed by Internet connection from anywhere
- Uses encrypted Internet transmissions
- Data is stored, backed up and secured by a specialist third party

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John Holland's Experience with Document Management



- Cultural Issues:
 - Resistance to change
 - Not used to a structured environment for communication
 - Unfamiliar with a truly electronic system
 - Perceived to be slow
- Current status:
 - Implemented on our two largest projects
 - Over 350 John Holland staff registered
 - 9 live projects

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John Holland's Experience with Document Management

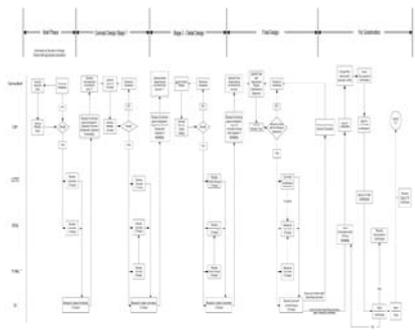


Key benefits:

- Collaboration linking all stakeholders
- Reliable version control
- Independent single repository for all project information and correspondence
- Full record and auditable trail
- Access from anywhere
- Searches on all documents
- Security with different views for each user
- Configurable to match business processes

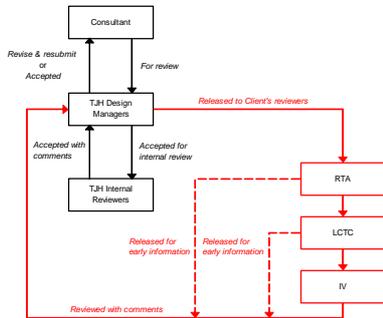
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Design Management Review/Approval Process

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Document Management: Automatic Design Review Process

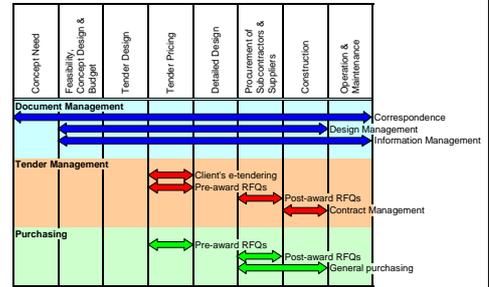


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Use of inCITE Through the Construction Process



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Conclusion



- John Holland committed to use of web-based collaboration tools
- Provide efficiency and control in the way we communicate, share information and trade
- Cultural barriers to be overcome
- Growing momentum in the uptake

Web-based collaboration will alter the way we do business by changing the way we interface with clients, other stakeholders and the supply chain as a whole.

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