

**RELATIONALLY INTEGRATED
VALUE NETWORKS for
TOTAL ASSET MANAGEMENT**
Findings from Singapore

Parallel study by
Assoc Prof Florence Ling and Benjamin Toh
National University of Singapore

Profile of respondents



- N= 32 questionnaires
(n= 873; 4% response)
- Experience: 34% more than 10 years.
- Designation: 53% mid and senior management
- Firm type: Client 38%; Consultant 34%; contractor 28%
- Work nature: 75% D&C; 25% O&M
- Layers of supply chain: 56% (1,2); 25% (3); 19% (>3)

| Rank | Goals in achieving 'better value' through above synergies | X |
|------|---|------|
| 1 | Cost, quality, time, safety | 4.78 |
| 2 | Effective and efficient information sharing | 4.53 |
| 3 | Efficient resource utilization & management | 4.41 |
| 4 | Dispute minimization, management & resolution | 4.16 |
| 5 | Lifecycle oriented project outcomes, including life cycle benefit-cost profiles | 4.0 |
| 6 | Relationship building and management | 3.94 |
| 7 | Long-term network building | 3.91 |
| 8 | Lifecycle oriented project drivers, including overall sustainability concerns | 3.88 |
| 9 | Expanded business opportunities | 3.66 |
| 10 | Organizational capacity building | 3.66 |
| 11 | Shared corporate social responsibility | 3.59 |

Key Stakeholders of D&C and O&M Value Networks

| Stakeholders | D&C Rank | A&M Rank |
|--------------------------------|----------|----------|
| Clients | 1 | 1 |
| Main contractors | 2 | 2 |
| Designers and main consultants | 3 | 3 |
| Sub-Contractors | 4 | 6 |
| Other consultants | 5 | 4 |
| Suppliers | 9 | 7 |
| Users | 8 | 5 |



Better value and synergies by linking the supply chains in D&C and in O&M.

Better value is achieved through:

- **Functional** integration (merging functions)
 - Sharing relevant information between **D&C and O&M**
 - Human resource capacity improvement
 - Joint use of **ICT tools** (eg BIM)



Better value is achieved through:



- **Relational** integration

(co-operative relationships built on shared goals)

- Sharing relevant information to address **sustainability** issues
- Similar **procurement protocols** between D&C and O&M
- **Life cycle optimization**: D&C and O&M understand each other
- **Overlapping** supply chains that deliver D&C and O&M
- Arranging **common resource pools** between D&C and O&M

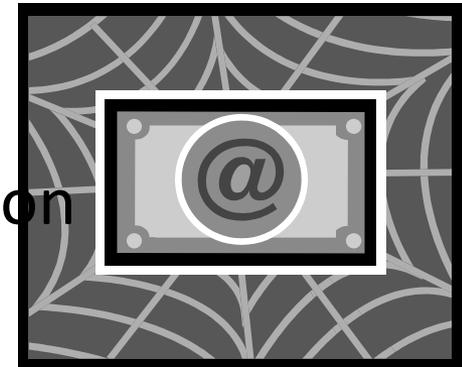
Better value is achieved through:



- **Transactional** integration
(formal linking of organizations)
 - Long term business opportunities
 - Business continuity management.
- **Relational integration most preferred** method for integration.
 - Loose form of cooperation; cheap and low maintenance
 - Relationship building is important
 - Embedded within the same network; instances of malfeasance quickly known and spread.

Strategies to develop & sustain an integrated value network for TAM

- Adopt relational patterns and **behavior**
 - **Partner selection**: quality, not just lowest cost
 - **Role approach**: clarify roles and responsibilities; improve coordination and communication
 - **Goal setting approach**: agree on output levels, clarify goals
 - **Problem solving approach**: common problem solving, team building, team effectiveness
 - **Interpersonal approach**: trust, cooperation, cohesiveness.
- Set up a web-based **database** (sharing information; identify opportunities; common problem solving)



THE END

Thank you for your attention

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