Current and future challenges facing NZ quantity surveyors: Priority issues and potential solutions

A Discussion Paper

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Outlines

- Introductions
- Key questions
- Method
- Results: Respondents’ demographics
- Results: Current challenges
- Results: Future challenges
- Conclusions
- Implications for quantity surveyors

INTRODUCTIONS: QUANTITY SURVEYOR – CORE PROFESSIONAL DUTIES

PRELIMINARY COST ADVICE

FINANCIAL & COST MANAGEMENT

PROCUREMENT & TENDER MANAGEMENT

CONTRACT ADMINISTRATION
KEY QUESTIONS

1. What are the current & future challenges facing quantity surveyors in NZ?

2. What potential solutions exist for addressing the challenges?

3. Which of the challenges and potential solutions are worthy of further detailed empirical investigations?

Empirical data for the research was obtained through personal interviews conducted over a 3 year period (from March 2012 to October 2014).

The interviewees were experienced quantity surveyors based in Auckland, Christchurch, Wellington, and the sub-regions of these cities.

Current & future challenges facing NZ quantity surveyors

STAKEHOLDER CHALLENGES
[Acts/ omissions of others]

QS CHALLENGES

Current challenges
- Pre-contract
- Construction
- Post construction

Core technical role

Future challenges
- Specialist services (facilities management, project management, adjudication,
- Keeping up-to-date with & adapting to rapid changes in the business landscape.
- Competitiveness/ continuing relevance.

Evolving professional role

EXTERNAL CHALLENGES
[Industry & market conditions, macro- & micro-economic, technological advances, statutory/legal, socio-cultural, global dynamics]

N Z I Q S
THE CONSTRUCTION COST SPECIALISTS
RESULTS: CURRENT CHALLENGES RELATING TO CORE PROFESSIONAL ROLE IN THE BUILDING DEVELOPMENT PHASES

Broad categories of challenges faced by QSs in the building development phases

Results: Current challenges relating to core professional role at the construction phase

1. Scope change & variation management.
2. Cash flow monitoring & reporting.
4. Defective/ non-compliant work.
5. Conflict management, negotiations & Dispute resolution.
7. Cost-to-complete forecasts.
8. Industry Capitalisation Overdraft/ credit facilities.
9. Record keeping.
10. Communication & reporting.
13. Interim valuations & payments.
14. Subcontract claim management.
15. Insurance & bonding.
16. Reconciling tendering & estimate assumptions with onsite cost realities.

Results: Current challenges relating to core professional role at the post construction phase

1. Agreeing final accounts.
2. Obtaining practical/ final completions & Code Compliance Certificates.
3. Capturing and valuing costs associated with snagging requirements.
5. Retentions release.
7. Liquidated & ascertained damages.
8. Arbitration/dispute resolution.

How can we navigate through poor design documentations and the uncertainties around future cost scenarios and provide accurate estimates and reliable cost advice?
**Project risk analysis**: Brainstorm with key role players to identify potential cost drivers/escalators and factor these into estimates and cost advice. Apply adequate estimate *contingencies* based on the established project risks.

Use performance evaluation & review technique (PERT) involving *3-point estimates* to assess confidence levels associated with cost estimates and forecasts.

Keep *accurate cost records* based on current & near-future market prices.
How can we tender and win jobs with sustainable margin potential in a tight & competitive market where clients prefer lowest priced lump sum contracts

**RESULTS: SUGGESTED SOLUTIONS: PRE-CONTRACT PHASE CHALLENGES (CONTRACTOR QS)**

1) **Client loyalty**: In current jobs, don’t just satisfy but delight clients that are frequent procurers to gain repeat engagements through negotiated tenders.

2) **Set up intelligent network** for monitoring and receiving feedback about competitors and owners’ tendering preferences for contracts within your specialist areas.

3) **Smart tendering strategies (STS)**: focus on the most promising tender opportunities - where you have a good chance of winning profitable contracts.

4) **Innovate & re-engineer** business processes through use of modern technology.

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Amidst the prevalence of poor communication and documentation, how do we carry out proper evaluations & provide impartial cost advice on contractor’s contractual entitlements which may be in conflict with client’s interests & expectations.
RESULTS: SUGGESTED SOLUTIONS: CONSTRUCTION PHASE CHALLENGES (CONSULTANT QS)

1) Promote **partnering** agreement which focuses on trust, transparency and win-win outcomes for parties.
2) Leverage **negotiation** & conflict management skills to resolve all cost-driven conflicts of interests and disagreements before they become full blown disputes that require arbitration, adjudication or litigation.
3) Use effective **communication** system to bring everybody on the same page in terms of contractual responsibilities, decisions, requirements and expectations.
4) Ensure accurate **documentation** of all original and revised project information impacting on costs, quality & time targets and communicate same to all parties in a timely and comprehensive manner.

How do we make sustainable *margins* on *lump sum fixed price* contracts won on *lowest cost conforming bid*, in situations where a client is quick to dispute claimed amounts within payment schedules, and where taking any formal DR steps results in reputational damage or removal from future tender lists?
1) Adopt **lean construction** principles (LCP), last planner methodology (LPM) and waste minimisation to reduce all forms of construction waste and costs.
2) Ensure effective & continuous **expenditure tracking** against budget and follow up early decisions against any over spending.
3) Recommend **closer supervision of the subcontractors’** work to ensure quality, cost and schedule performance and minimise defective work and cost and time overruns.
4) **Capture all variation orders** and ensure **signed off** and that costs & time implications are **agreed** upon prior to onsite implementation.
5) Ensure **proper record keeping** of evidences for supporting progress and final claims.
6) Ensure **accurate documentation** of all original and revised project information impacting on costs, quality and time targets and communicate same to all parties in a timely and comprehensive manner.

1) How did prior *assumptions* and expectations compare with out-turn events?

2) What *lessons* can we learn from current project to help us improve on future projects?

3) How do we balance ethical, contractual and financial challenges around final accounts settlement and yet maintain enough positive image and confidence to earn us the *client’s invitation for future jobs or positive reference*?
1) **Project debrief**: Hold post-contract audit/debrief session with all stakeholders to fully articulate major challenges that were encountered in the course of the project and the novel approaches employed or that could have been employed to resolve those challenges. Document lessons learnt.

2) **Client satisfaction survey**: Survey client’s perceptions on what was done well and what was not, and his or her advice on how an organisation can improve in future to better meet its needs.

3) **360 degree check**: Also survey other stakeholders’ perceptions on how company performed on the project and what lessons could be carried forward to enhance stakeholder relationships and achieve better outcomes.

4) Ensure **accurate record keeping** of all lessons learnt and stakeholder feedback.
RESULTS: FUTURE CHALLENGES RELATING TO EVOLVING ROLES OF THE QS

1. ENHANCED TECHNICAL ROLES:
   - Building economist;
   - Value engineer;
   - Commercial manager; etc

2. NEW & EMERGING SPECIALIST ROLES:
   - Project management,
   - Dispute resolution,
   - Asset valuation & management, etc

1) What **new and emerging developments** are expected to shape future directions in the field of quantity surveying?

2) What **skills and knowledge** does the quantity surveyor need to be able to respond more proactively to these developments, maximise the opportunities and minimise inherent threats?

3) What **training programmes or CPDs** are required to provide the quantity surveyor with the requisite skills and knowledge for growth and continuous relevance?

1) Quantity surveying is just one of the integral parts of the built environment supply chain (BESC).

2) A significant proportion of the challenges the profession faces draws from the wider problems of the BESC.

3) Holistic and long-lasting solutions to these problems require a coordinated approach that looks at the broader issues of the BESC and the constraints of the external business environment.
IMPLICATIONS FOR QSS

BROADEN SKILL-SET TO HELP:
1) RE-ENGINEER YOUR OPERATIONS,
2) PROACTIVELY EMBRACE CHANGE AND
3) STRATEGICALLY LEVERAGE THE OPPORTUNITIES TO SUCCEED AND REMAIN RELEVANT

A multi-disciplinary and collaborative approach is required to address the identified problems with a view to finding multi-dimensional solutions that add value to businesses.
