

Book Presentation!

Measurement of Construction Work Quantities

By: **MUSA SALAU**, BSc, MSc, FNIQS



Historical Background

**MAJOR TRANSFORMATION
IN THE CONSTRUCTION
MEASUREMENT STANDARDS
PROMPTED BY THE RICS'S
MIGRATION FROM SMM7 TO
NRM2**

**EFFECTIVE DATE
OF BESMM4**



**NIQS'S LAUNCH ITS
OWN VERSION OF THE
NEW STANDARDS,
BESMM4, DONE
ALONG THE SAME
PRINCIPLE WITH
NRM2.**

**NATIONAL POLICY
COMMITTEE OF
NIQS'S DEADLINE
FOR THE ADOPTION
OF BESMM4**



Observed Outcome

There seems to be
foot-dragging
among members in
embracing the **new
Measurement
Standards.**



implications

Ambiguity in work descriptions → lack of transparency

Inconsistency in projects costing → inability to compare project costs

Difficulties in interpreting documents → prevalence of overruns & even disputes

Measurement Standards.. a criterion in cost quantification

Improving project cost performance is obviously possible by refining cost quantification skills - **Alan Muse, RICS (2017)**

Pre-requisite to a successful cost quantification will be a consistent improvement in the standardisation of data format - **See Lian, FIG (2017)**

More attention to technological development and standards will results in more effective and productive construction - **Alan Muse, RICS (2019)**

Remodeling & Refocusing QS Profession

Measurement Standards

Global Consistency in presenting construction costs – ICMS goal

Enable performance comparisons & encourage transparency

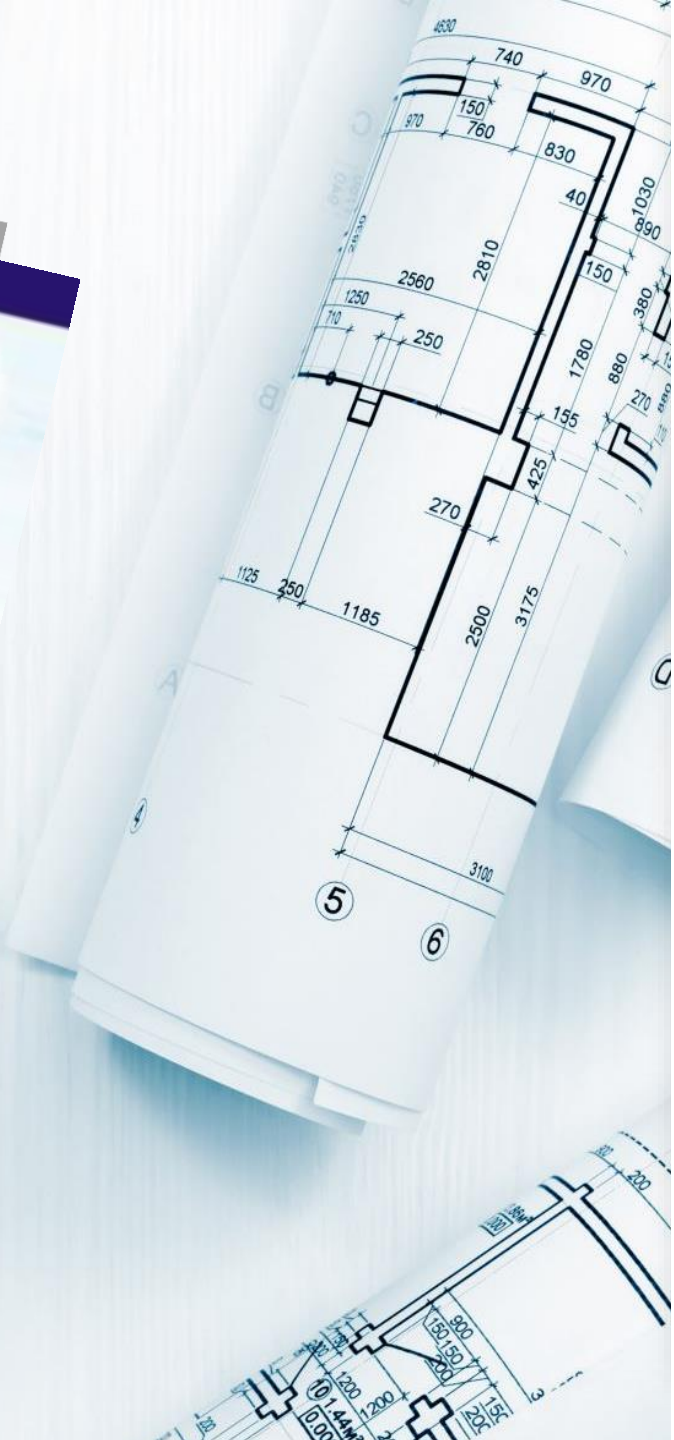
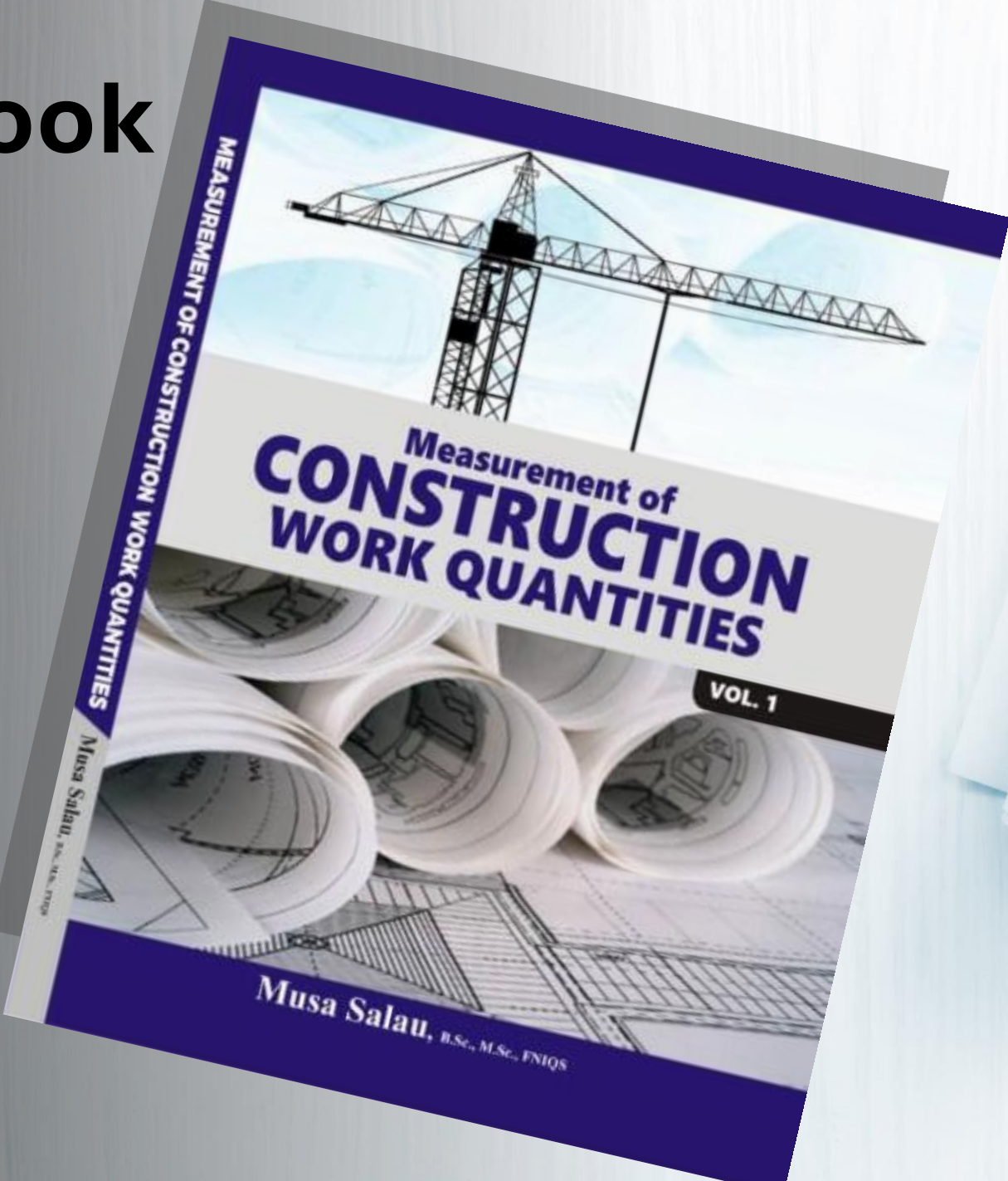
Automation in construction cost quantifications

Measurement Standards (i.e. NRM2, POMI) are being adopted on BIM platform to perform automated cost quantification.

Increase in demands for more detailed cost quantifications

Recent editions of ICMS has consideration for life cycle costs and recognise the criticality of reducing green house gas emission

The Book



The Book – 17 Chapters

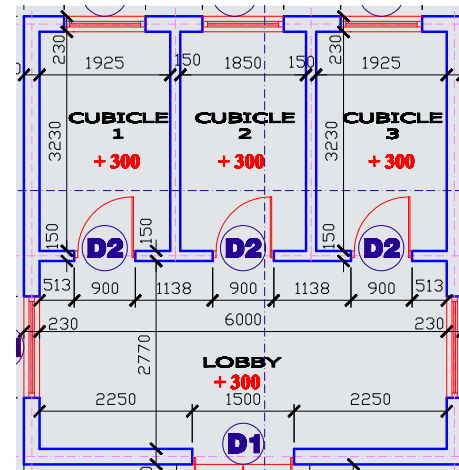


1: Scope of Measurement of Construction Works



2: Principles of Construction Works Measurement

3: Concept of Taking-off Work Quantities



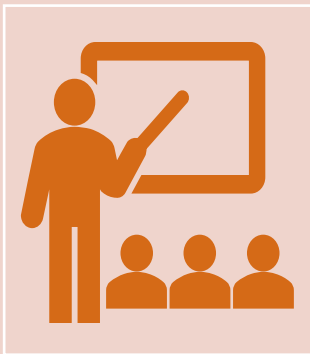
4-17: Worked examples across all work elements typical in a building project.

3.00		Plain in-situ concrete, grade 20, mass concrete, 225mm thick, in trench filling, substructure, poured on or against earth or unblinded hardcore
2.00		
1.50		
4.50	↑	
3.00	NIL	
2.80	↓	

THE BOOK ...



Founded on the Revised 4th Edition of Building and Engineering Standard Method of Measurement (BESMM4R) published by the NIQS.

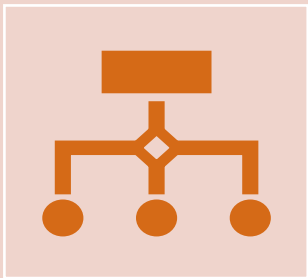


Structured into two learning perspectives:
(a) Explanatory notes on construction tech.,
(b) display of taking-off skills for different work elements commonly encountered in building construction projects including M&E.

THE BOOK ...



Explanatory side notes are provided to explain the step-by-step procedures in the taking-off processes of each item.



Measurement codes are shown against all work descriptions to show the applicable measurement rules used in the taking-off.

THE BOOK ...

Recommended
as:

A valuable source of learning for students studying quantity surveying

Preparatory stuff for candidates preparing for Institute's professional examinations

An excellent reference material for quantity surveying practitioners

Thank you.

