NIGERIAN INSTITUTE OF QUANTITY SURVEYORS

The professional construction cost managers.

NIQS

Sustainable Construction Claims Management:

Confluence of Theory, Practice and Innovations

Relevance of Cost Data to Claims Management on Construction Projects

DATE: 24th- 25th April 2024

VENUE: Jigawa State Manpower Development Institute,
Dutse, Jigawa State

By:

Adebowale Oyinleye- FNIQS, MRICS, PMP, LEED BD+C

PROJECTS ACADEMY- TRAINING AND CONSULTANTS

Outline

01. Introduction

Cost

Relevance

Cost database

Claims Management

02. Cost Data

Why Data Matters

Cost database

Basic unit of Cost

Sources of Cost data

03. Cost & Claims

It's a matter of Time

The Nexus

Identify and Analyze

Data Driven decision making

04. The Relevance of Data

Challenging the Data

Interpretation can have two sides.

05. Closing

The Database

Introduction

Data definition

"information, especially facts or numbers, collected to be examined and considered and used to help with making decisions:"- [Cambridge]

"factual information (such as measurements or statistics) used as a basis for reasoning, discussion, or calculation [Cambridge]"

" information output by a sensing device or organ that includes both useful and irrelevant or redundant information and must be processed to be meaningful"- [Merriam-Webster]

Introduction

Relevance definition

"the degree to which something is **related or useful** to what is happening or being talked about:" [Cambridge]

"**the ability** (as of an information retrieval system) **to retrieve material** that satisfies the **needs of the user**" [Merriam-Webster]

retrieving material or data for claims management

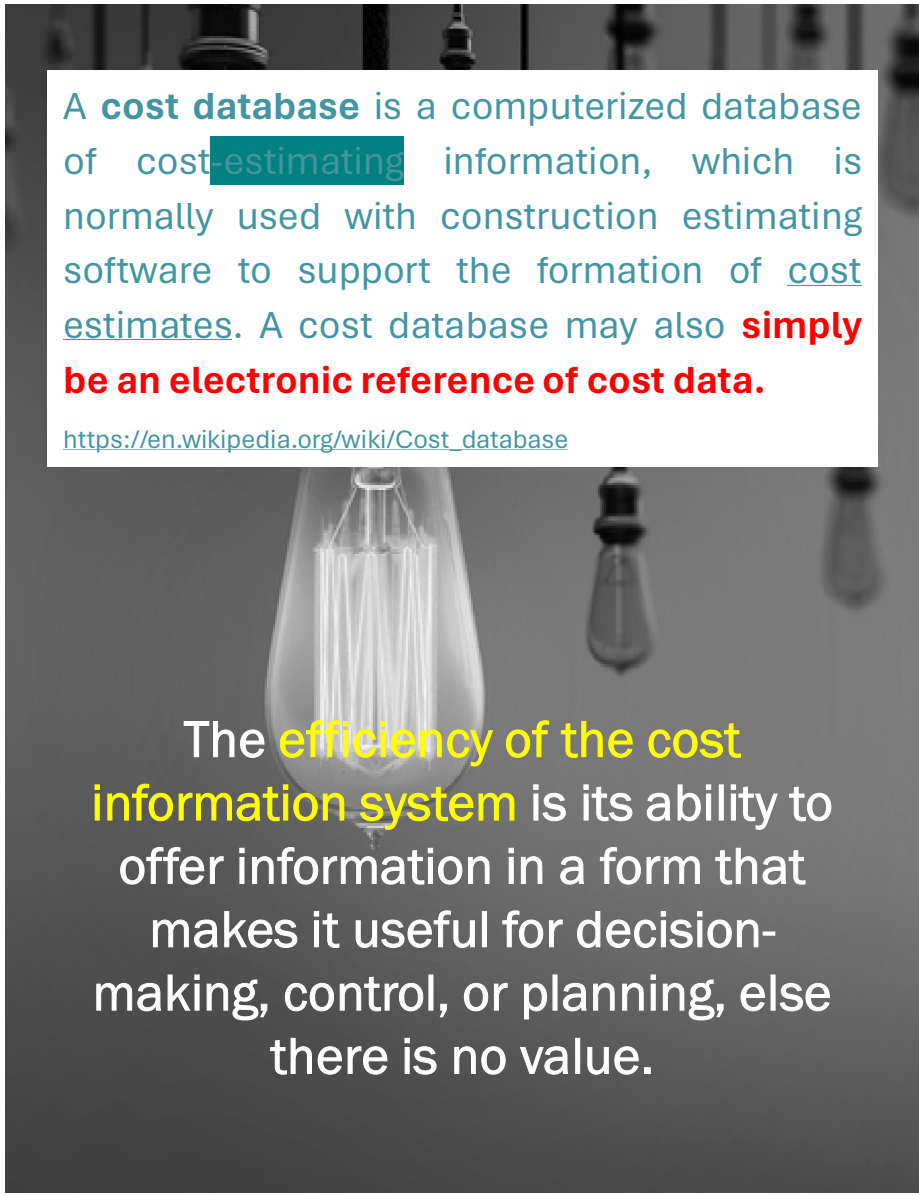
https://dictionary.cambridge.org/dictionary/english/relevance

https://www.merriam-webster.com/dictionary/relevance

Introduction

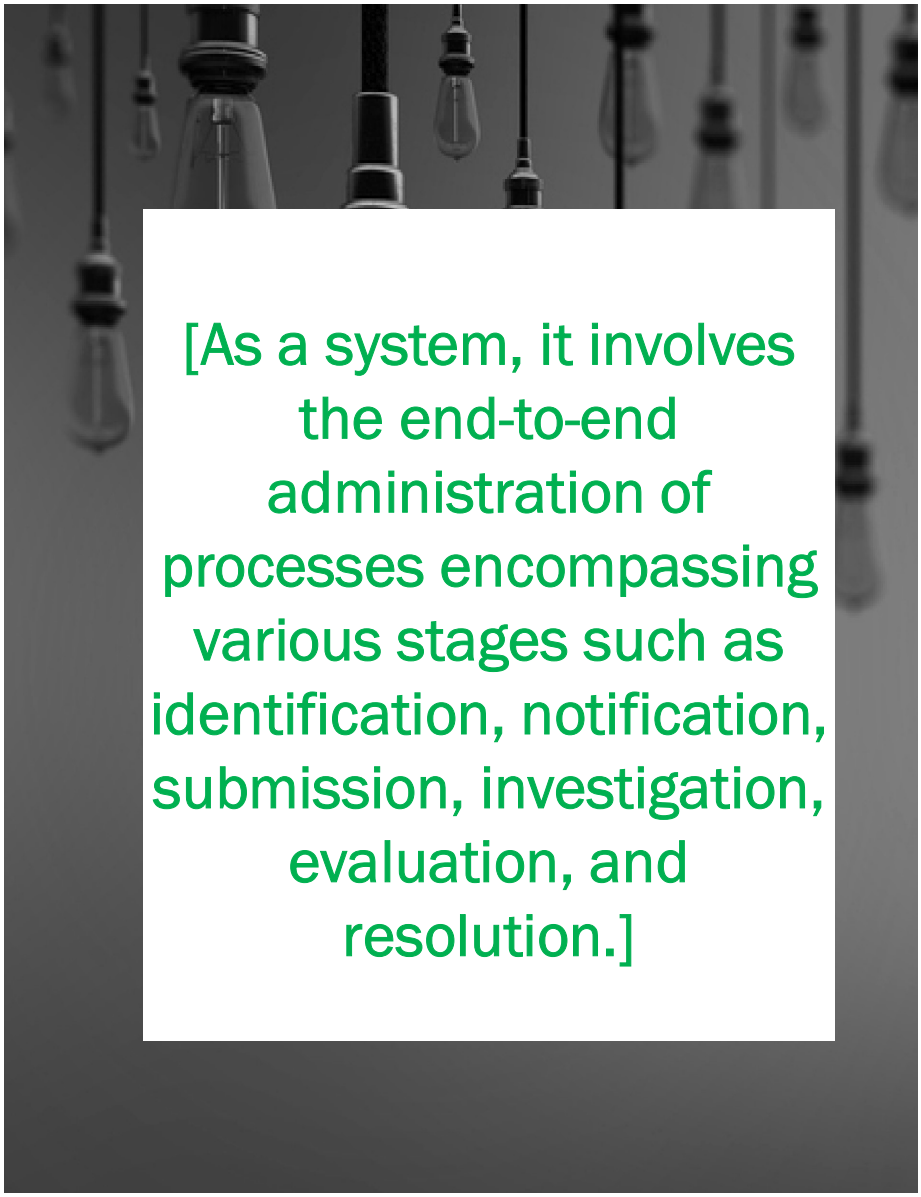
WHAT ARE 'COSTS'?

Costs are the value of all resources or input needed to produce a product, service, or outcome of interest. It generally comprises different types of expenditures incurred.



CLAIMS MANAGEMENT

This is the act of providing advice and services in respect of claims for payment or compensation, relief, remedy for time, financial loss or any breach of contractual obligation by either party.



Introduction

On most Construction projects, preparing and analyzing claims can be a challenging task. Depending on the nature of the issues that make up the claim, some expertise in engineering, construction, project /construction management, and law may be needed to either prepare or defend against claims.

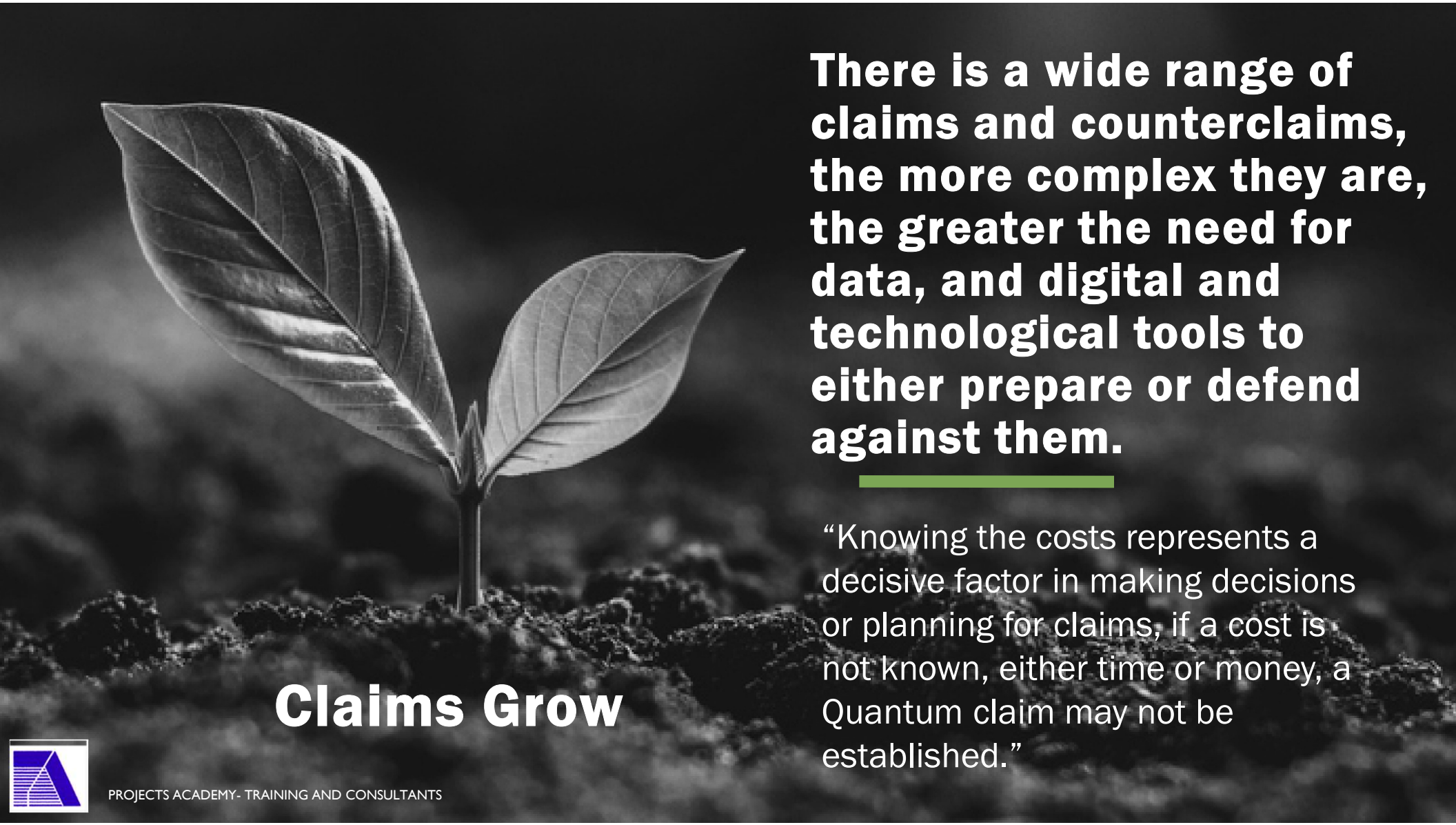
EXAMPLES OF CLAIMS

“Actual cost is the proper basis for evaluating claims

The best cost data is that which shows actual costs

- Loss of Profits claims
- Bad Weather /Force Majeure claims
- Delay claims, both by the contractor for extended overhead costs and by the owner for liquidated or actual damages
- Disruption/Loss of Productivity Claims
- Acceleration claims
- Differing Site Conditions Claims
- Changes in Scope claims, including Cardinal Change claims
- Constructive Changes claims
- Defective and Deficient Contract Documents claims
- Termination/Suspension claims
- Variation in Quantity claims

INFORMATION IS KEY, THE PARTY WITH SUPERIOR INFORMATION IS KING AND HAS THE MASTER KEY.



Claims Grow

There is a wide range of claims and counterclaims, the more complex they are, the greater the need for data, and digital and technological tools to either prepare or defend against them.

"Knowing the costs represents a decisive factor in making decisions or planning for claims, if a cost is not known, either time or money, a Quantum claim may not be established."

What Is Cost Data and Why Is It Important?

Cost data is the information on the amount of resources – Labour, materials, time, equipment - consumed or expended for a specific activity, project, product, or service.

Planning and Budget

For construction projects, by estimating the expected costs and allocating the available resources accordingly

Monitoring and Control

The performance and efficiency by comparing the actual costs with the planned or budgeted ones, and identifying the variances and the causes of deviations- Claims

Evaluation and Improvement

The procedures and results, by examining cost drivers and the relative value of various options.

Communication and Reporting

financial outcomes and impacts by creating and delivering cost reports and statements

The basic unit of cost data

Specifications	Resources	Rates	Elemental Costs
• Cost is not arbitrary it must stand on something- **SPECIFICATIONS**	• The labor, materials, equipment, and the like that are needed **only come from descriptions** of the work to be done.	• This is usually subjective as it relies on much information that is both **relative and absolute.** Tender vs Basic • **Mark-up and overheads are added**	• This is a result of a combination of rates and quantities for a set of common works. • **It is used at a global level.**

Cost data is essential for organizations as it helps them to take informed decisions

Steps & Methods to collect and process cost data

Define the cost object and the cost purpose	Identify the cost elements and the cost drivers	Select the cost method and the cost model	Collect and validate the cost data	Analyze and interpret the cost data
• ***The cost object*** **and the cost purpose** determine the scope and the level of detail of the cost data • **The cost object** is the new work , project, and the **cost purpose** is to plan and budget the project and to monitor and control its progress and performance.	• The categories or parts of the overall cost, such as labor, materials, overhead, etc., are called cost elements. The actions or circumstances that affect or create changes in the cost elements—volume, quality, complexity, etc.—are known as cost drivers.	• The process or method used to gather and compute cost data, such as historical cost, standard cost, current cost, etc., is known as the cost method. The framework or structure used to organize and show cost data, including total cost, direct cost, variable cost, fixed cost, etc., is known as the cost model.	• The cost data can be collected from various sources, such as accounting records, invoices, receipts, surveys, interviews, observations, etc. The cost data should be validated to ensure that they are complete, consistent, relevant, and reliable and that they comply with the cost method and the cost model chosen)	• Ratios, trends, variances, benchmarks, etc., can be used to evaluate and understand the cost data. For the cost purpose and the cost object, the analysis and interpretation of the cost data should yield insightful and actionable steps • to compare the actual and the planned costs of the project, to identify the causes and the effects of the deviations.

Sources of cost data

1] Contract Data

Information that states particular costs, mostly generic.

2] BOQ or Schedule of Rates

This is the basic and fundamental primary source of cost data in a contract.

3] Planning or Programming

Tells you how resources were to be deployed

4] Appendices

These are a huge source of uncaptured or unassigned cost modifiers.

Site instructions

Always Begin from PRIMARY

Sources of cost data

By gathering reliable cost data from these sources, you can ensure that your estimates are accurate and **reflect the current market conditions- However, contemporaneous Records far outweigh them in claims management**

1] Market surveys

Used to gather information on the current costs of resource inputs. This can involve contacting suppliers, contractors, or industry experts to obtain prices.

2] Industry publications

provide cost data specific to type. They may contain cost indices, trends, or benchmarks that can be used to estimate or evaluate costs

4] Cost databases

provide comprehensive cost data for various types of projects/assets. These databases often include information on materials, labor, and equipment, etc culled from market surveys, Industry publications, and Historical data.

3] Historical cost data

This is a record of cost over time. This can be particularly useful for assets that have a long lifespan, or for which cost data is limited

Factor and adjustment of data

Various factors may be useful in the adjustment of cost data before application

TIME	LOCATION	CURRENCY	OVERHEAD FACTORS	TAX, INSURANCE, AND BOND RATES
• Factors to adjust costs from one time to another	• Factors to adjust costs from one location to another	• Currency conversion factors	• The allowances for overhead differ from project to project and across the type of contractor or the risks allocation.	• The taxes on a project affects the rates applied in arriving at both price and cost, Insurances are a direct result of the risks involved.

Cost data and Claim management – The Nexus

A Claim is about cost , time or both

Cost data is developed from cost measurement which refers to a process of collecting, processing, analyzing, and reporting on costs

Why Measure Costs?

RECORDS!
RECORDS!!
RECORDS!!!

Why Measure Costs?

- To ensure evidence-based data
- To provide sufficiently detailed data to understand the true costs
- to improve the quality of decisions made

HISTORICAL & CONTEMPORANEOUS

COST & CLAIMS

“

CLAIMS =

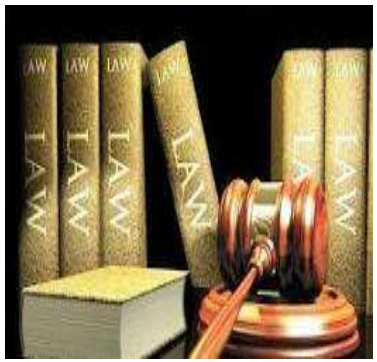
Cost

+

Time

Claims evaluation

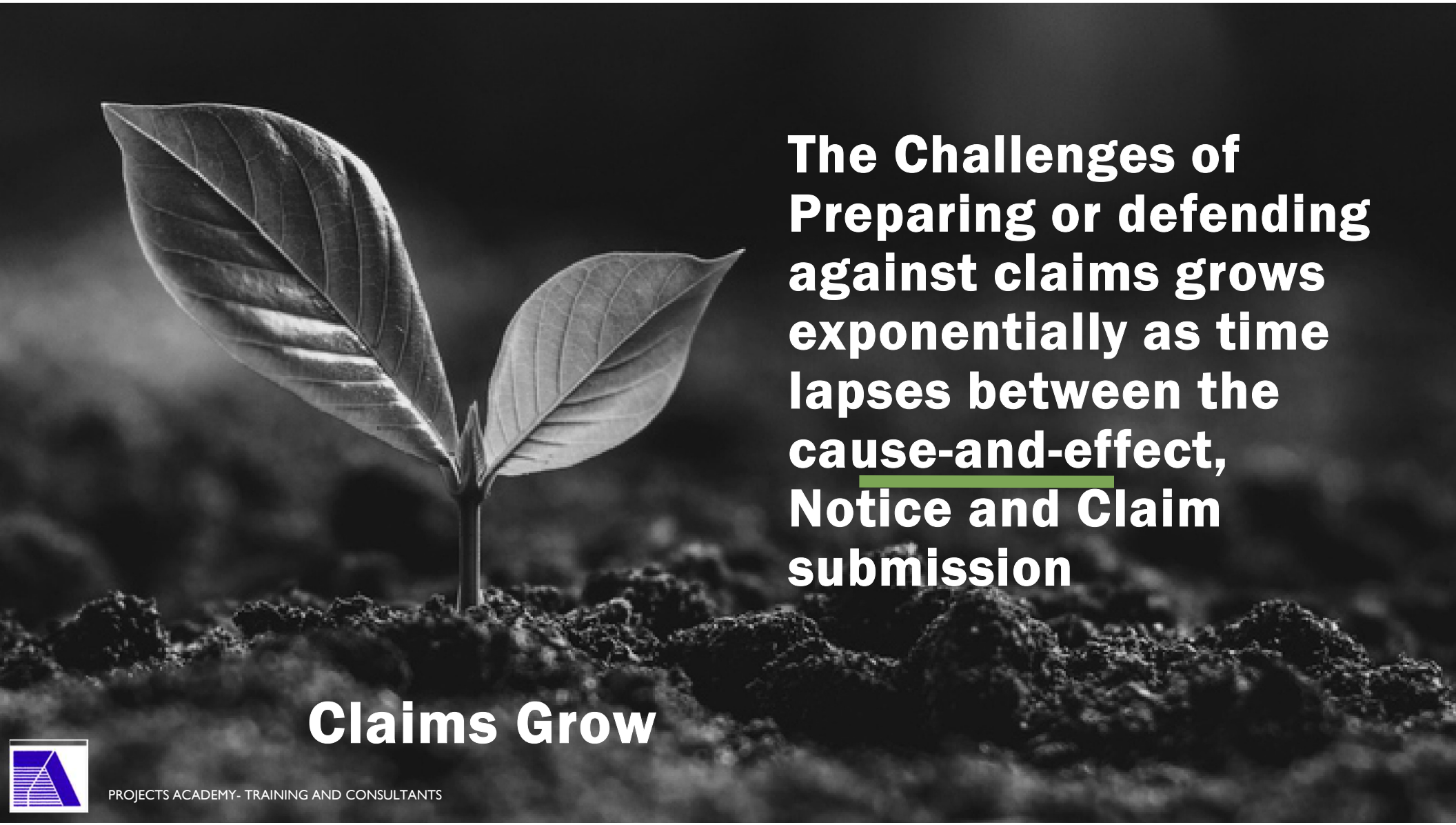
Claims must be properly constituted and documented



Proper legal entitlement must be established

Cause and effect must be clearly demonstrated by contemporaneous records

Additional costs must be backed up by full supporting documents


The Challenges of Preparing or defending against claims grows exponentially as time lapses between the cause-and-effect, Notice and Claim submission
Claims Grow

Data-Driven Decision Making

“

Data-driven decision-making (DDDM) is the process of using data to make informed and verified decisions

WHAT?

Knowing the process of data-driven decision making and how it relates to Claims

WHY?

The importance of DDDM to the overall success of claims preparation or defence.

HOW?

Gather Data now, Analyse and Understand

Benefits/ Relevance of Cost Database

1] Streamlining claims management

Claims management is a crucial aspect of the construction industry, as it directly impacts the efficiency of the project delivery and the satisfaction of the stakeholders

2] Provides the basis of Comparison

The basis of a cost database is to archive data over time, this helps with the comparison of data to other cost analysis projects by ensuring there is enough information to develop a realistic understanding of your costs

5] Centralised data management

The fundamental relevance of a database approach is the importance of data as an asset

4] Helps decision-making

Cost database allows professionals to make decisions regarding a claim by providing a simple basis for evaluation, prediction and quantum verification of costs.

It also allows the filter and adjustments of variables to see alternative outcomes of the data available

3] Simplifying claims Processing

implementation of data processing and analysis helps to automatically review and validate claims

The Relevance

A cost is relevant if it is relevant to the decision under consideration

Factors affecting data relevance

Timeliness

- How close in time is the data to the time of claim processing
- **Was the data obtained at the time of cause?**

Quality

- How clean is the data?
- Are there issues that has influenced the integrity of the data?
- Is there a need to change units or measurements in order to make it useful?

Assessibility

- Does your data need more adjustments to make it useful or is it usable at the level it was gathered.
- The more adjustments needed the more likely the variances introduced

Closing

Advantages of Database

Information is key to making informed decisions, either for or against a claim, hence historical and contemporary records are important.

DDDM

Document the information utilized, the problems encountered, the analyses performed, and decisions made on every claim.

A bad plan is better than no Plan

Relying on relevant cost data is better than not having one, this will highly impact the success of a claim

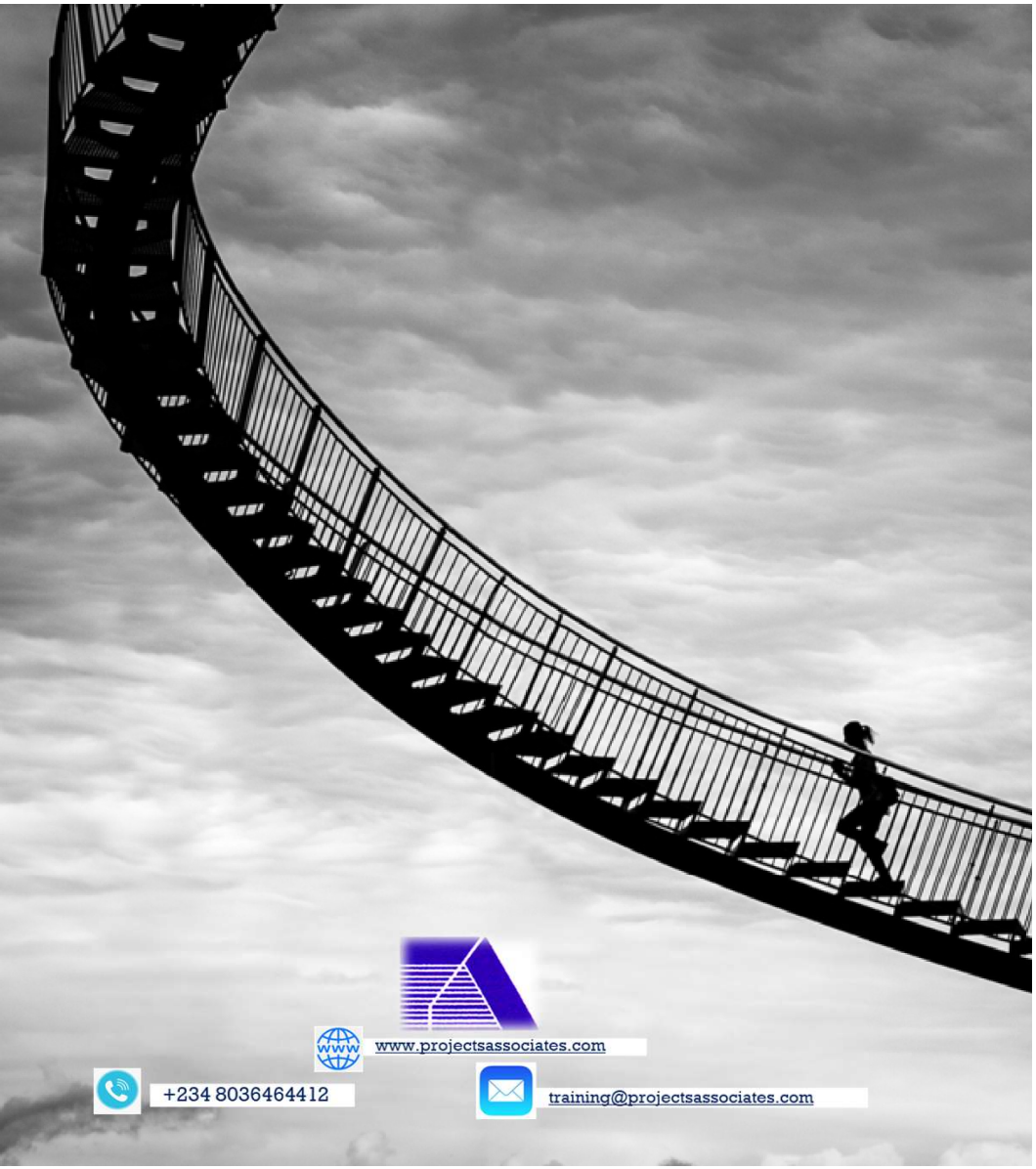
Developing a reputation

Having a record of well-prepared claims will enhance of success of subsequent claims.

Limitations

The limits of what you can infer from cost data must be appreciated to avoid confirmation bias.

There is a growing interest in the use of cost databases, to routinely measure and inform decision-making



Thank you

NAGODE!

References

https://fastercapital.com/topics/what-is-cost-data-and-why-is-it-important-for-businesses-and-organizations.html/1

https://www.designingbuildings.co.uk/wiki/Contract_claims_in_construction

https://theconstructor.org/construction/construction-claim-types-causes-preventive-measures/567135/

https://www.datapine.com/blog/data-driven-decision-making-in-businesses/