

Asset Information – Sharing Data for Collaboration
Iain Sanders – Powerco, Data Architect
Powerco / Date 25th June 2019

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 - ❑ **In attendance were representatives from:**
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 - ❑ Friday 24th May, Transpower Office, Wellington
 - ❑ In attendance were representatives from:
 - ❑ Transpower, Unison, Orion, Alpine Energy, EEA, Genesis Energy, Vector, Waipa Networks, Mercury, WEL Networks and Powerco
 - ❑ **Key topics for discussion covered were:**
 - ❑ **Asset Information Maturity Model – Transpower & Unison**
 - ❑ **Asset Information Strategy – WEL Networks**
 - ❑ **Drawing & Model Management (DMM) – Transpower**
 - ❑ **Data Quality & Governance – Powerco & Unison**
 - ❑ **Building Information Modelling (BIM) – Transpower**
 - ❑ **Digitalisation of Asset Management – various**
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Our Focus – Developing an Asset Information Maturity Framework

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 - ❑ **there is a need to develop best practice in asset information management to ensure consistency and efficiency across the industry in New Zealand.**
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 - ❑ To support this, the working group from the Asset Information Managers' Forum is creating a self-assessment framework:
 - ❑ **for assessing maturity in asset information using examples of current good practise from several organisations in these sectors.**
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 - ❑ there is a need to develop best practice in asset information management to ensure consistency and efficiency across the industry in New Zealand.
 - ❑ To support this, the working group from the Asset Information Managers' Forum is creating a self-assessment framework:
 - ❑ for assessing maturity in asset information using examples of current good practise from several organisations in these sectors.
 - ❑ The key use for this framework is to help assess whether an organisation has the key components of an asset information management system:
 - ❑ **which meet the above requirements in the New Zealand electricity generation, transmission and distribution sectors.**
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 - A unified approach to sharing and referencing information supporting these endeavours by:**
 - Referencing standard templates, models and documents,**
 - Providing alignment between standards adopting different scales,**
 - Collaborating on adopting the best asset information maturity model,**
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 - Referencing standard templates, models and documents,
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 - Collaborating on adopting the best asset information maturity model,
 - In order to deliver continuous improvement of data mgt. for asset lifecycle optimisation.**
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For Example

Level Definition	1. Identify	2. Develop	3. Operate	4. Improve	5. Optimise
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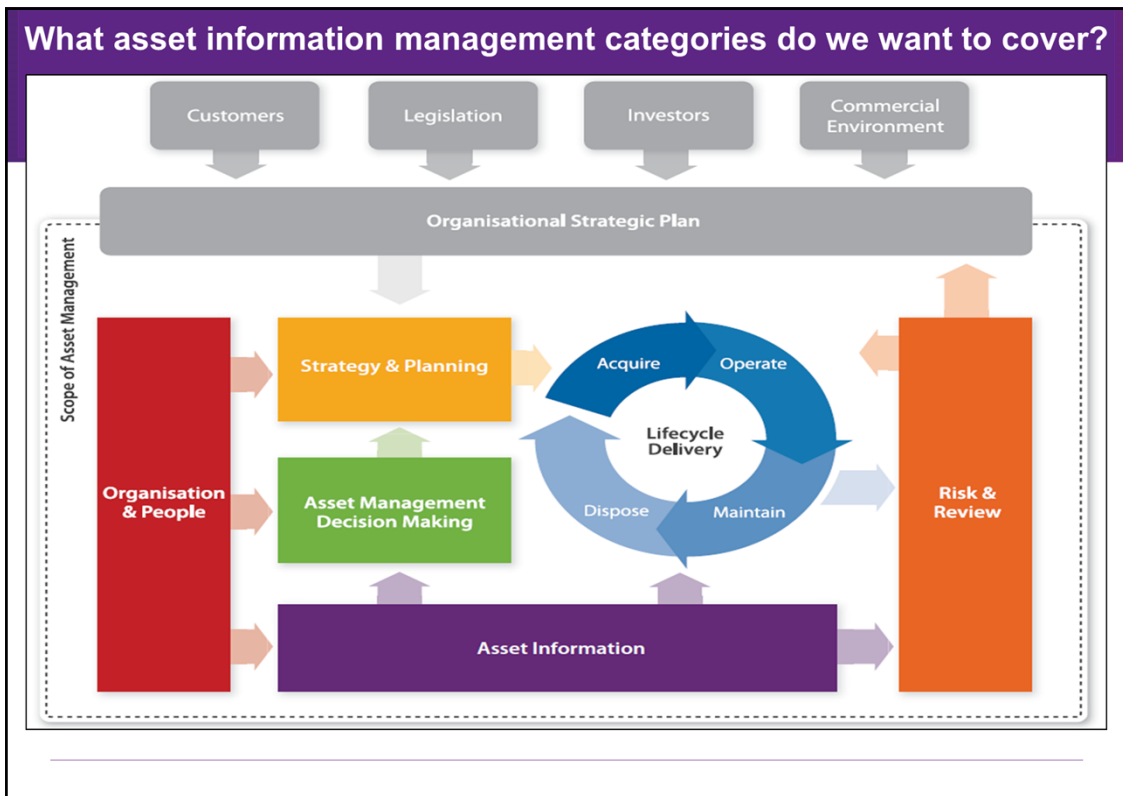
For Example

Level Definition	1. Identify	2. Develop	3. Operate	4. Improve	5. Optimise
Level Components	<ul style="list-style-type: none"> a. Identify b. Prioritise c. Define 	<ul style="list-style-type: none"> a. Develop b. Test c. Install 	<ul style="list-style-type: none"> a. Systematically b. Continuously c. Consistently 	<ul style="list-style-type: none"> a. Identify b. Validate c. Adopt 	<ul style="list-style-type: none"> a. Target b. Match c. Sustain

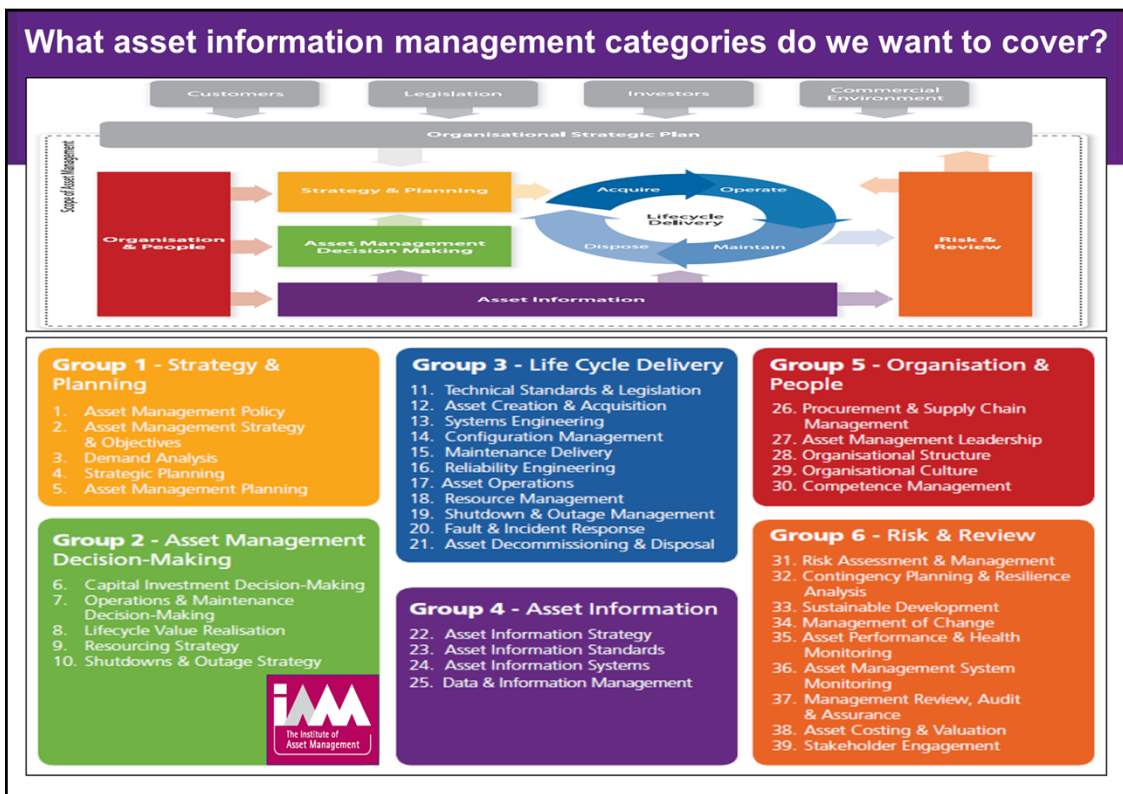
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What asset information management categories do we want to cover?

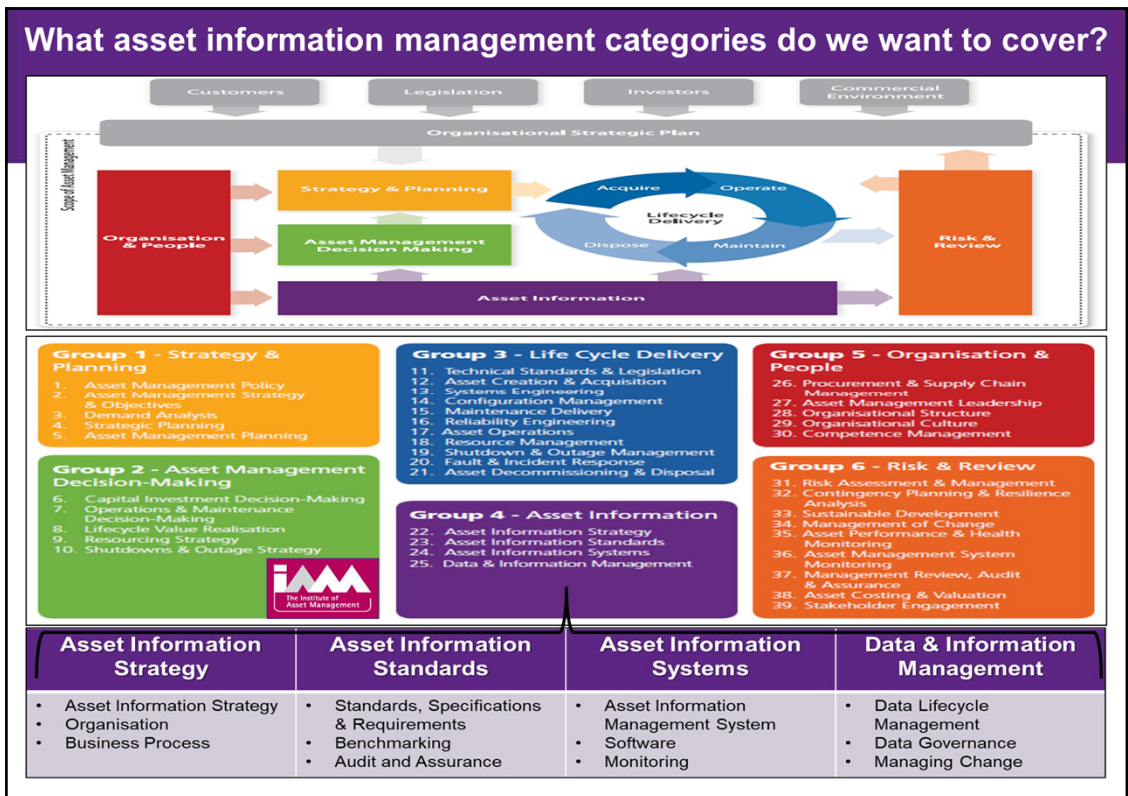
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What standards and reference models do we need to align? What is helpful? What is not? What is missing?

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Compliance

Asset Mgt. Maturity Assessment Tool (AMMAT)

Learning → Applying → Embedding → Optimizing and integrating → Beyond the reference standard

Awareness → Development → Competence → Excellence

Maturity level 0	Maturity level 1	Maturity level 2	Maturity level 3	Maturity level 4
The elements required by the reference standard are not in place. The organisation is in the process of developing an understanding of the reference standard.	The organisation has a basic understanding of the reference standard. It is in the process of deciding how the elements of the reference standard will be applied and has started to apply them.	The organisation has a good understanding of the reference standard. It has decided how the elements of the reference standard will be applied and work is progressing on implementation.	All elements of the reference standard are in place and are being applied and are integrated. Only minor inconsistencies may exist.	Using processes and approaches that go beyond the requirements of the reference standard. Pushing the boundaries of asset management development to develop new concepts and ideas.

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Planning

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IIMM International Infrastructure Management Manual

IPWEA INSTITUTE OF PUBLIC WORKS ENGINEERING AUSTRALIA International Edition 2015

Section 2 | Understand Requirements

- 2.1 Setting the Strategic Direction
- 2.2 Establishing Levels of Service
- 2.3 Forecasting Future Demand
- 2.4 Collecting Asset Information (Asset Knowledge)
- 2.5 Monitoring Asset Performance and Condition

Section 3 | Lifecycle Planning

- 3.1 Lifecycle Decision Methods
- 3.2 Managing Risk
- 3.3 Operational Planning
- 3.4 Capital Investment Planning
- 3.5 Financial Planning

Section 4 | AM Enablers

- 4.1 Asset Management Leadership and Teams
- 4.2 Asset Management Plans
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- 4.4 Information Systems and Tools
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Lifecycle Delivery

Group 3 - Life Cycle Delivery

11. Technical Standards & Legislation
12. Asset Creation & Acquisition
13. Systems Engineering
14. Configuration Management
15. Maintenance Delivery
16. Reliability Engineering
17. Asset Operations
18. Resource Management
19. Shutdown & Outage Management
20. Fault & Incident Response
21. Asset Decommissioning & Disposal

COMMERCE COMMISSION NEW ZEALAND
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Continuous Improvement

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ISO 55001
PDCA representation of ISO 55001 clauses

Plan: 4. Context of the organisation (4.1-4.3), 5. Leadership (5.1-5.3)

Do: 6. Planning (6.1-6.2), 7. Support (7.1-7.3), 7.4 Communication, 7.5 Information requirements, 7.6 Documented information

Check: 8. Operation (8.1-8.3), 9. Performance evaluation (9.1-9.3)

Act: 10. Improvement (10.1-10.3)

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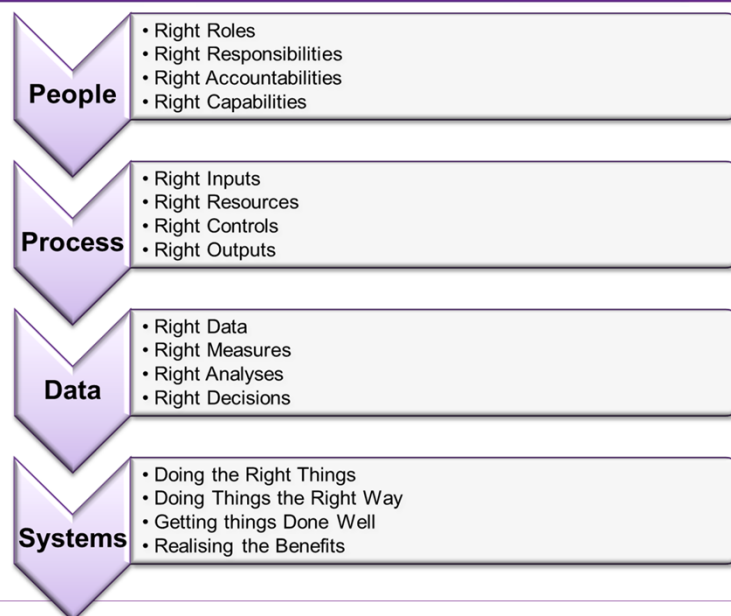
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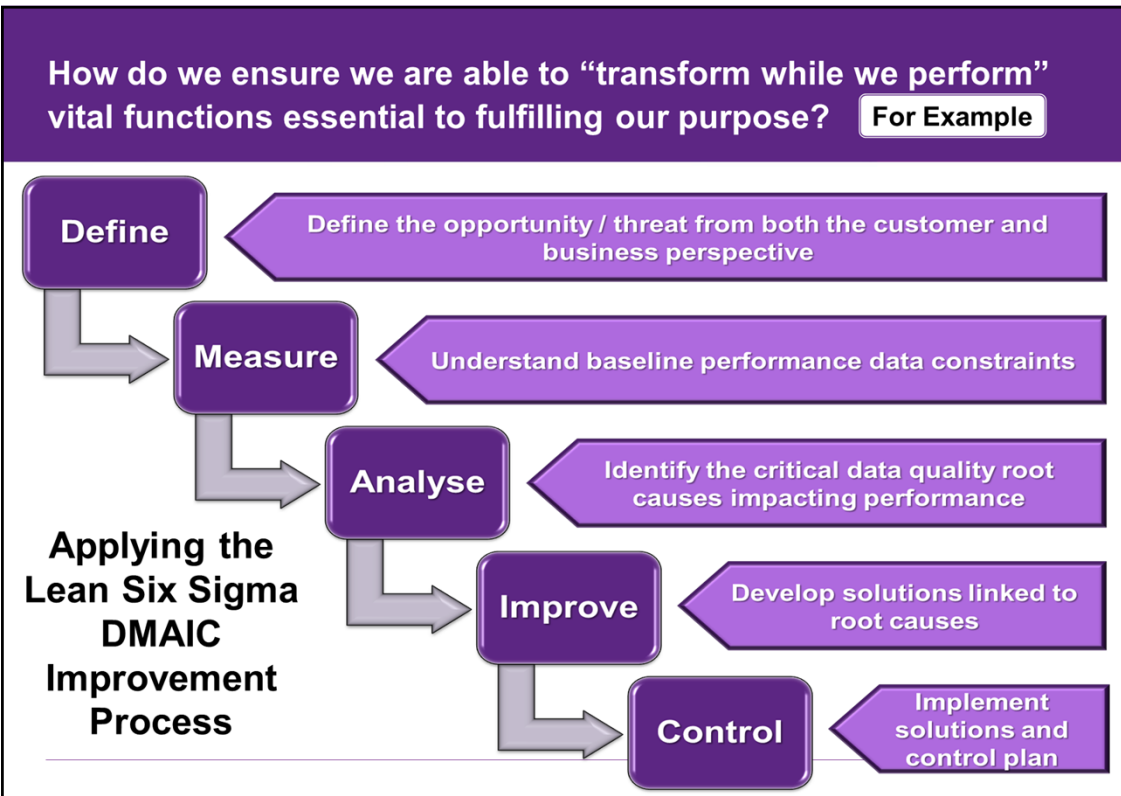
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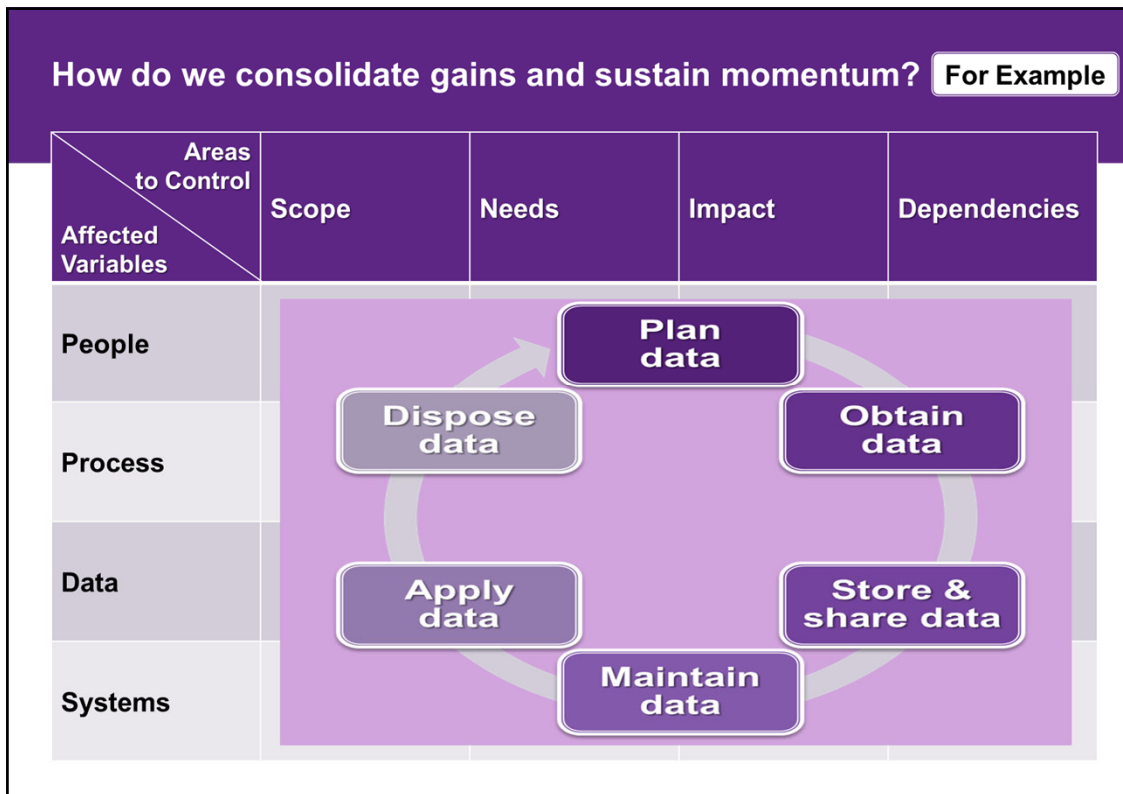
How do we ensure we are able to “transform while we perform” vital functions essential to fulfilling our purpose? For Example

Stage	Criteria	Focus	Transforming vs. Performing
1. Define Data Criticality	Where and to what extent is the business compromised?	Problems Identified (Gap Analysis)	Transforming Potential
2. Measure Data Constraints	What would happen if we don't have the data or systems we need?		
3. Analyse Data Quality	What is wrong with the data / systems and where is this happening?		
4. Improve Data Quality	How do we correct current errors and prevent future errors?	Solutions Identified and / or Implemented	Performing Requirement
5. Control Data Quality	What controls need to be established and maintained?		
6. Review Data Quality	How well are we transforming while performing and vis-versa?		

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How do we consolidate gains and sustain momentum?

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How to get involved

Please contact:

- Jules Congalton**
- Asset Management System Manager**
- Unison Networks Limited**
- Email: jules.congalton@unison.co.nz**

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Thank you for your attention!

For more information about Powerco visit our Facebook page or powerco.co.nz

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