



AM Sustainability

Links Between Energy Management and Asset Management



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Speaker Introduction

Darius Booyens

Lives in Pretoria, Gauteng

4 Years Experience as Mechanical Engineer

- Product Management and Product Design throughout.
- Site energy reduction through cooling optimisation Telecommunication sites.
- Developing business cases for products.

8 Months Experience as Associate Consultant at Pragma Africa

- Critical spares parts identification
- Asset registers development
- Asset care plan development



Agenda

- What is Energy Management
- What is Asset Management
- Similarities between EM and AM in Function and Process
- Key Objective of both EM and AM
- The Links Between EM and AM
- The Changing Landscape of FM
- Global Drive towards Energy Asset Management
- Possibilities of Integration between EM and AM_

What is Energy Management?

The **judicious** and **effective** use of energy management to maximise **profits** (minimize **costs**) and enhance competitive positions.

OR

The strategy of **adjusting** and **optimizing** energy, using systems and procedures so as to **reduce** energy requirements per unit of output.

What is Asset Management?

A systematic approach to the governance and realization of **value** from assets that a company is responsible for, over their whole life cycles.

OR

A systematic process of developing, operating, maintaining, upgrading, and disposing of assets in the most **cost-effective** manner (including all **costs**, risks and **performance** attributes).



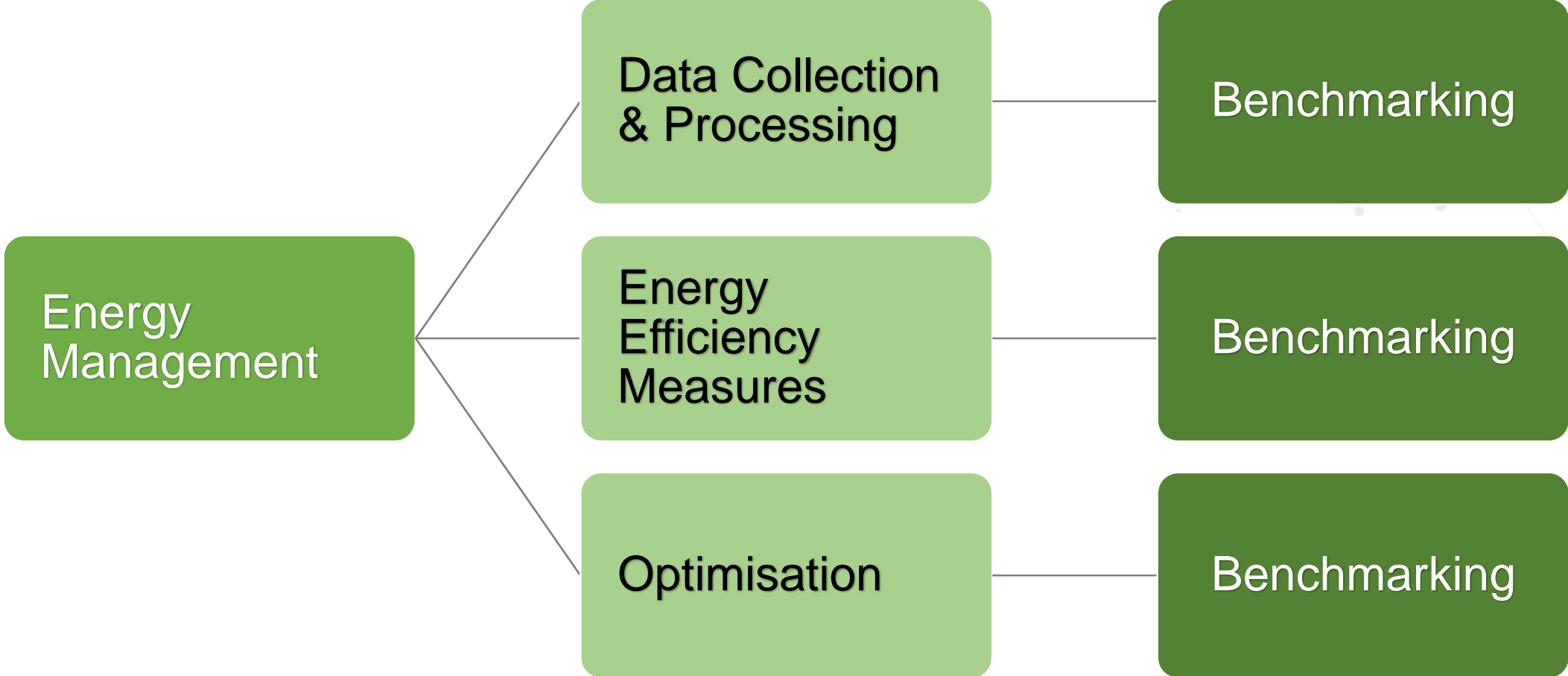
Similarities Between EM and AM in Function



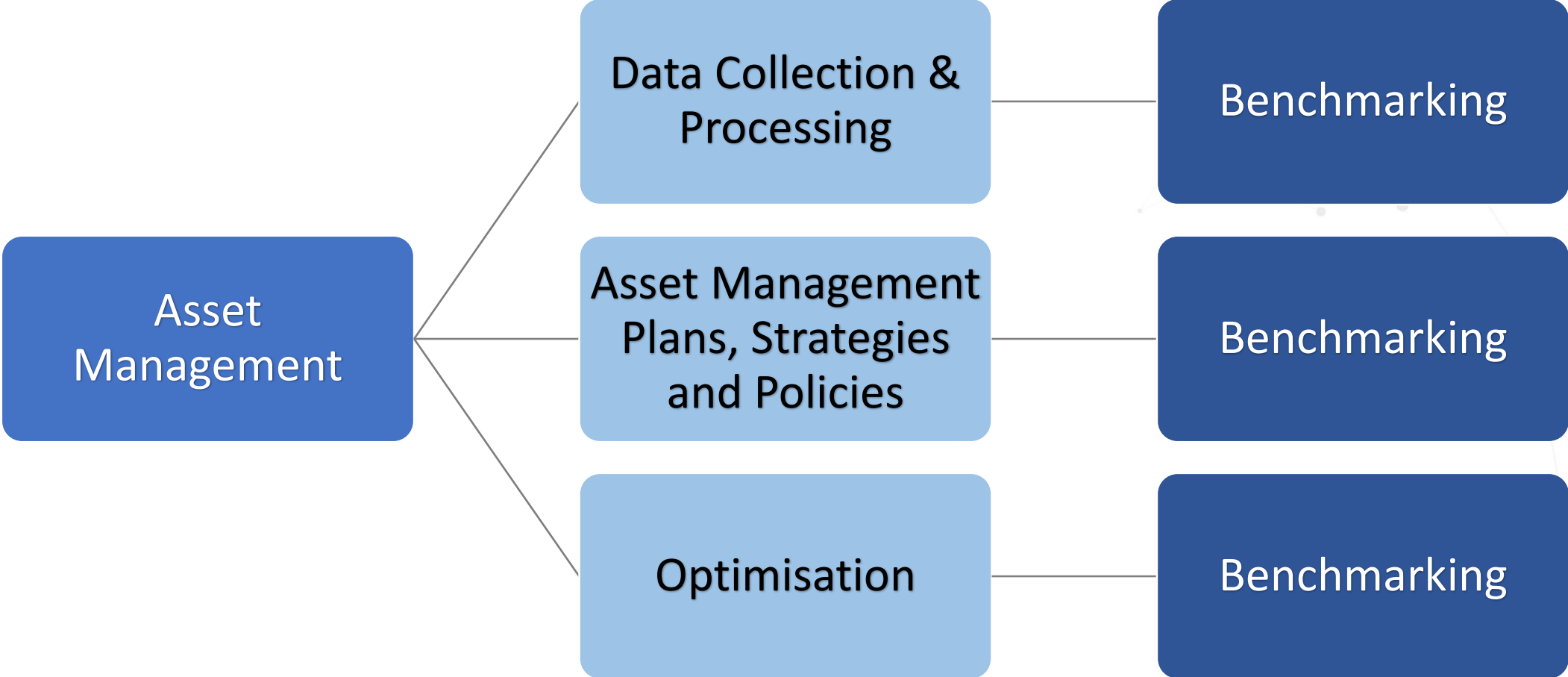
Key Objective of both EM and AM

performance
effective
costs
profits
maintaining

Similarities between EM and AM in Process



Similarities between EM and AM in Process



Traditional Views of AM and EM

Energy Management

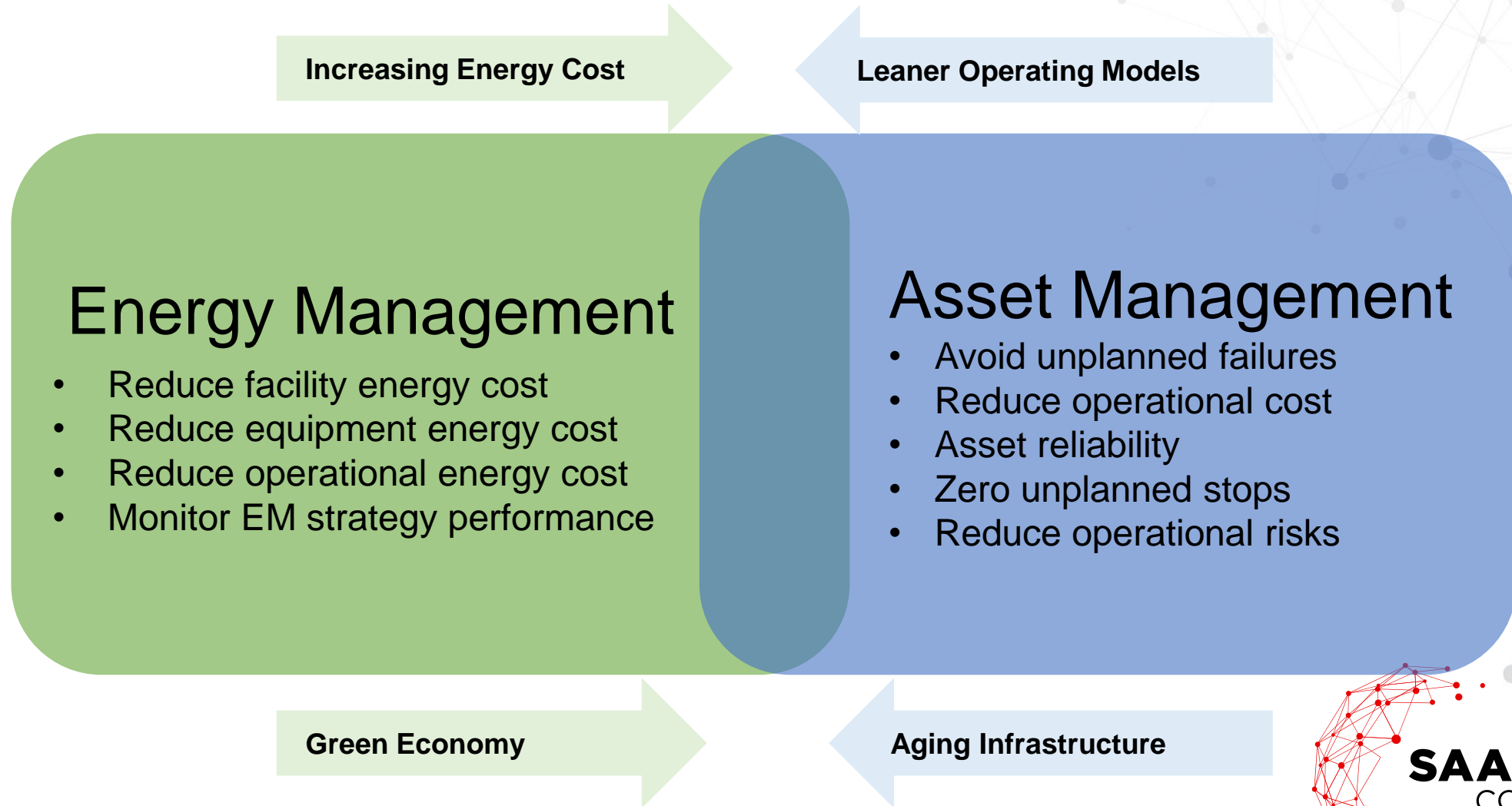
- Reduce facility energy cost
- Reduce equipment energy cost
- Reduce operational energy cost
- Monitor EM strategy performance

Asset Management

- Avoid unplanned failures
- Reduce operational cost
- Asset reliability
- Zero unplanned stops
- Reduce operational risks

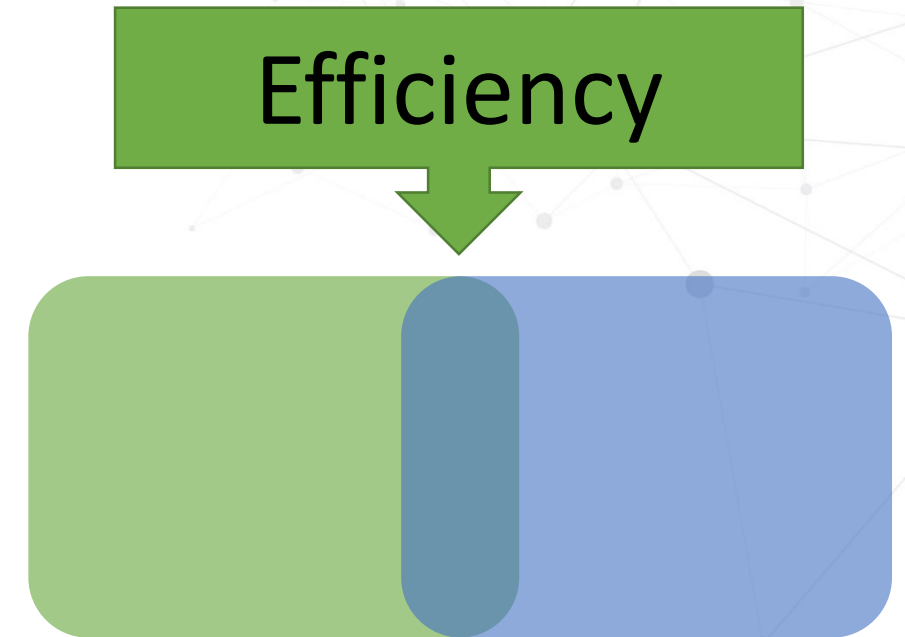


Amalgamation of Traditional AM and EM Views



Links between EM and AM | Possible Explorations

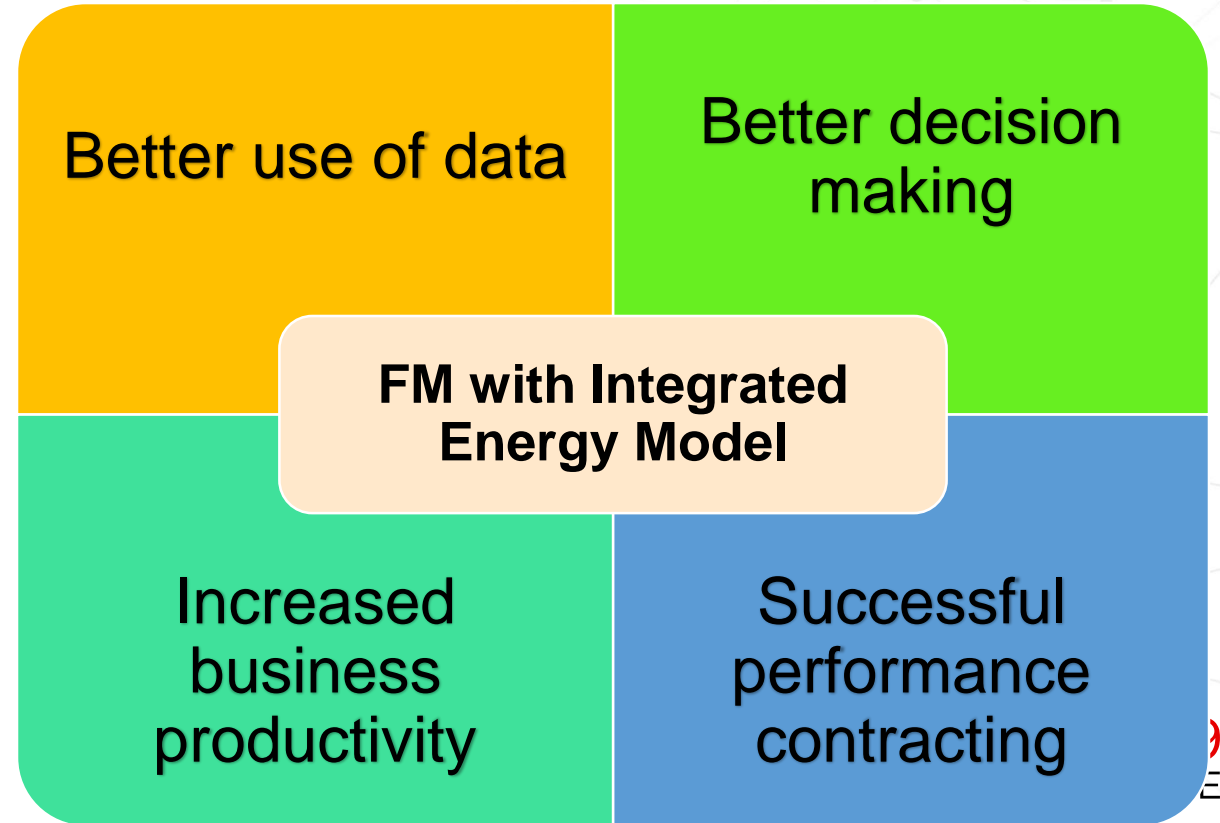
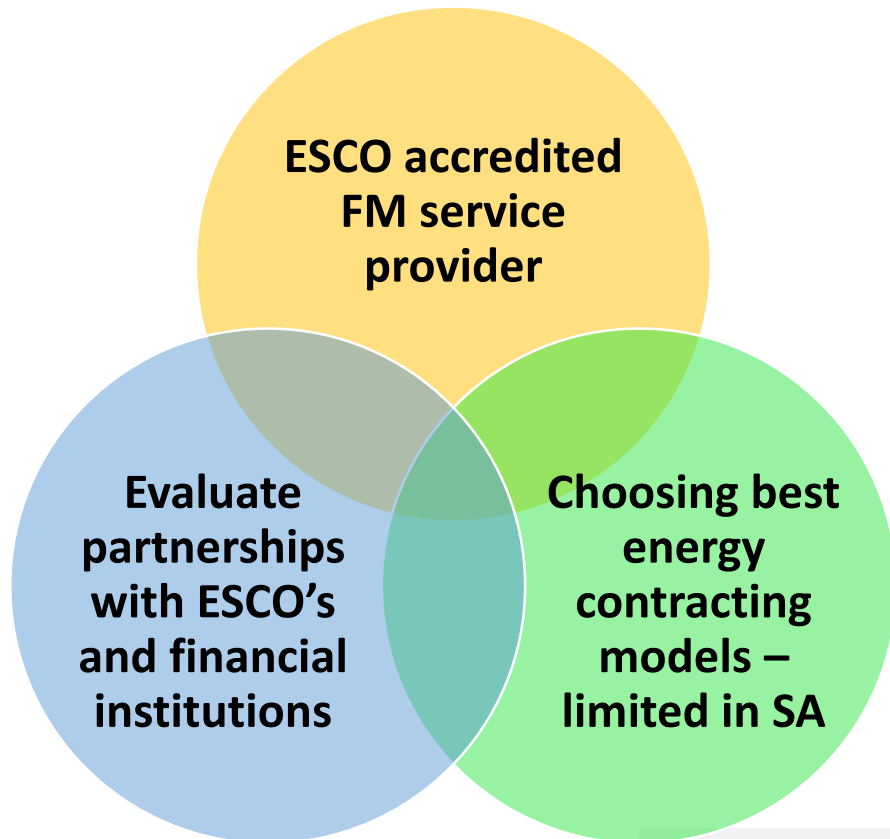
- Real time monitoring.
- Advanced data analytics.
- Software tool integrating EM and AM strategies.
- PM and CM – Energy status and energy consumption risks.
- Measurement tools - equipment energy consumption to support maintenance, replacement and process control.
- IoT to integrate CM
- Changing environment of FM



The Future of Facilities Management?

Whitepaper - Energy & Environment Practice, Frost & Sullivan (2018)

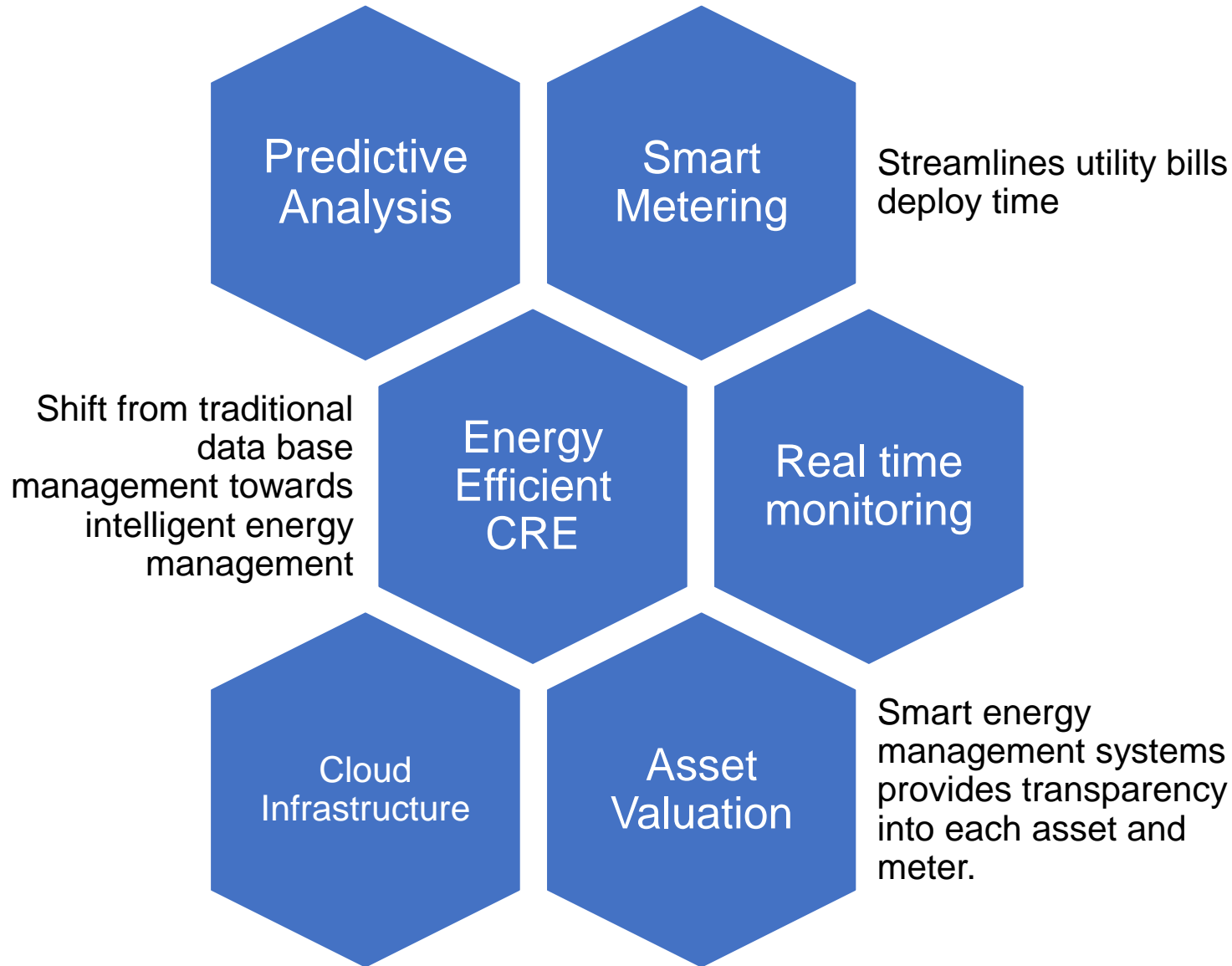
FM companies are integrating Workplace Management, Smart Technologies and Energy Management services.



ESCO – Energy Service Company



The Future of Facilities Management?

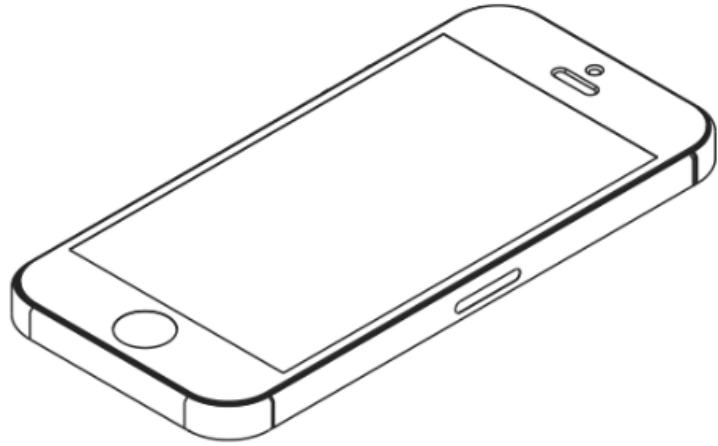


CRE – Commercial Real Estate
EMS – Energy Management System



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concerns inquiry
helpdesk information
knowledge

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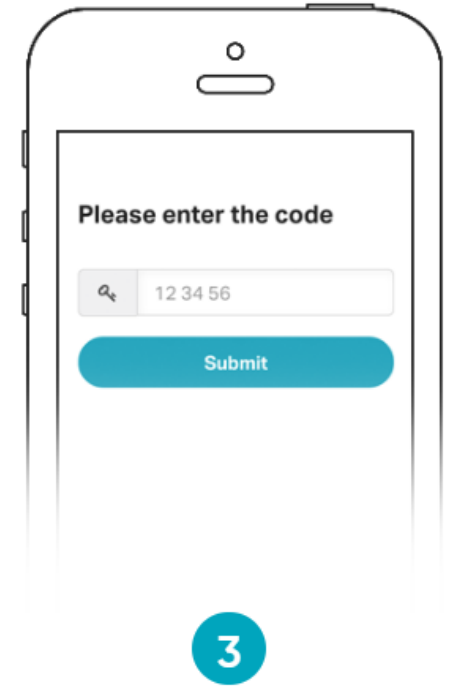
1

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How Many Times Must a Man Look Up Before he can See the Sky?

“To change our reality and the world around us we cannot simply believe that our existential thoughts will lead us down paths that are worthy; but rather we should fully immerse ourselves in the reality of that which is truly worth pursuing, that leads to a purpose bigger than ourselves and to that which does not waste our lives. A worthy path demands full dedication, unwavering in its purpose despite the battles it may invoke.”

A silhouette of a tree on a grassy hill against a sunset sky with stars.

Thank You

Please speak to me if you
have questions not
answered in the Q&A

Darius Booyens

