

NATIONAL
ENERGY
FOUNDATION

*Improving the use of
energy in buildings*

The understated role of Asset Information Management in Low Energy Retrofit

Luke Smith, National Energy Foundation

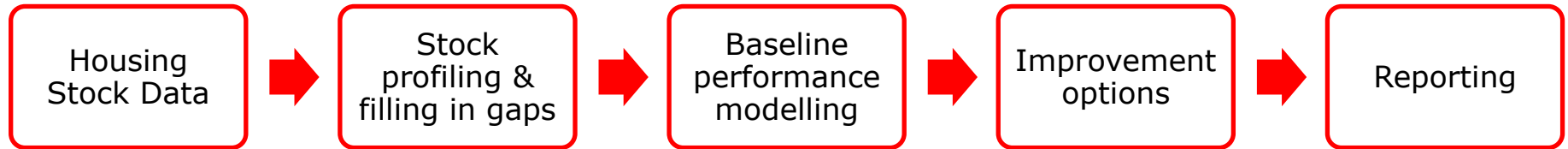
NHF Development, Asset Management and Maintenance
Conference, 21st Sept 2016

Energy not the only show in town...

- Wider information management related challenges include:
 - Rent reductions / budget constraints
 - Welfare reform - universal credit, under/over occupancy
 - Right to Buy / disposals / alternate tenure models
 - Acquisitions / mergers
 - HCA 'Assets and Liabilities' and VFM self reporting requirements
 - Efficiency e.g. HCA global accounts year on year -2% R&M cost reductions
 - Wide spread policy volatility – Brexit, planning reform, energy efficiency policy
- Where do energy and sustainability objectives fit?

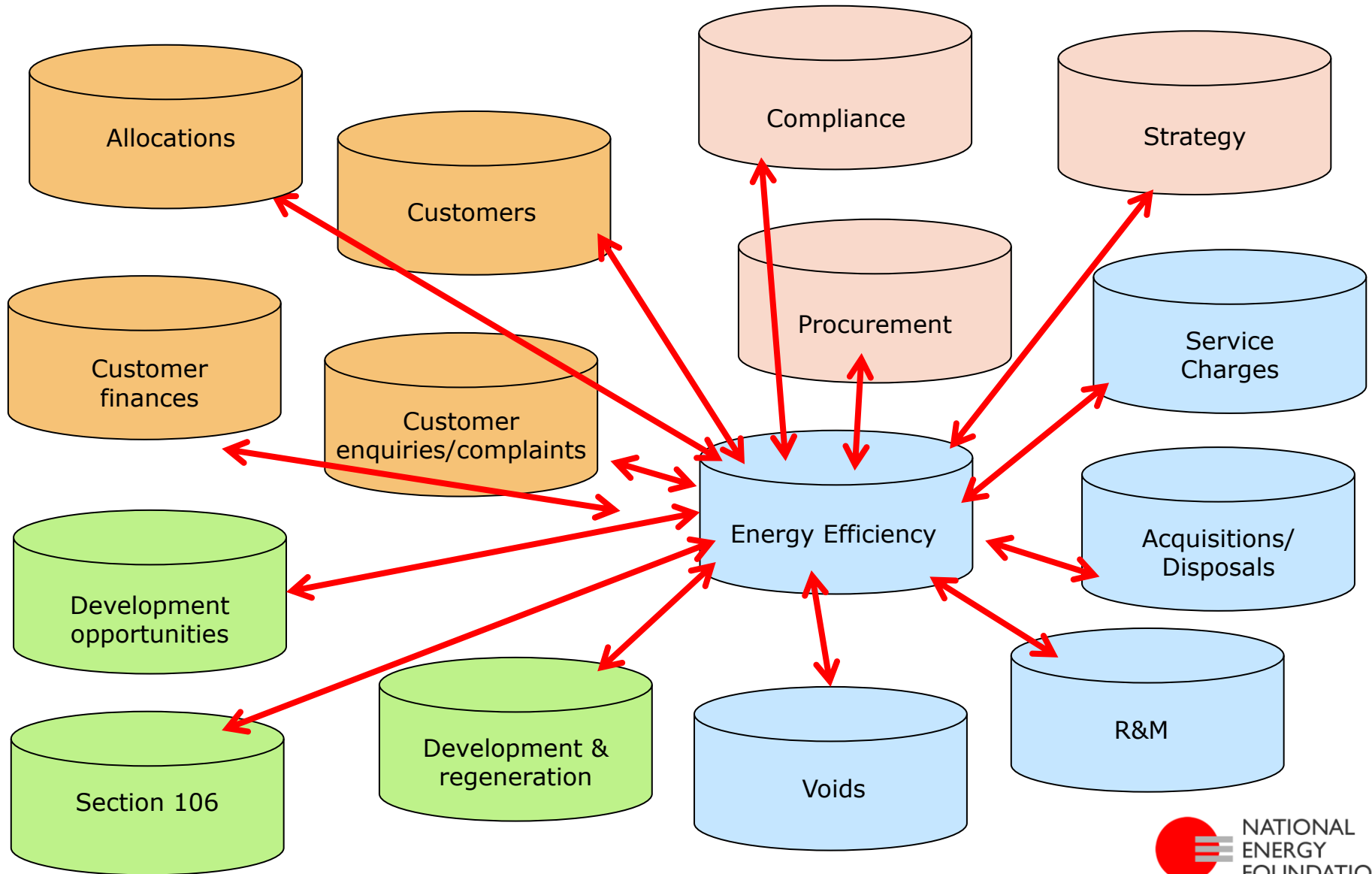
Typical practice stock modelling

Common approach to energy investment appraisals:



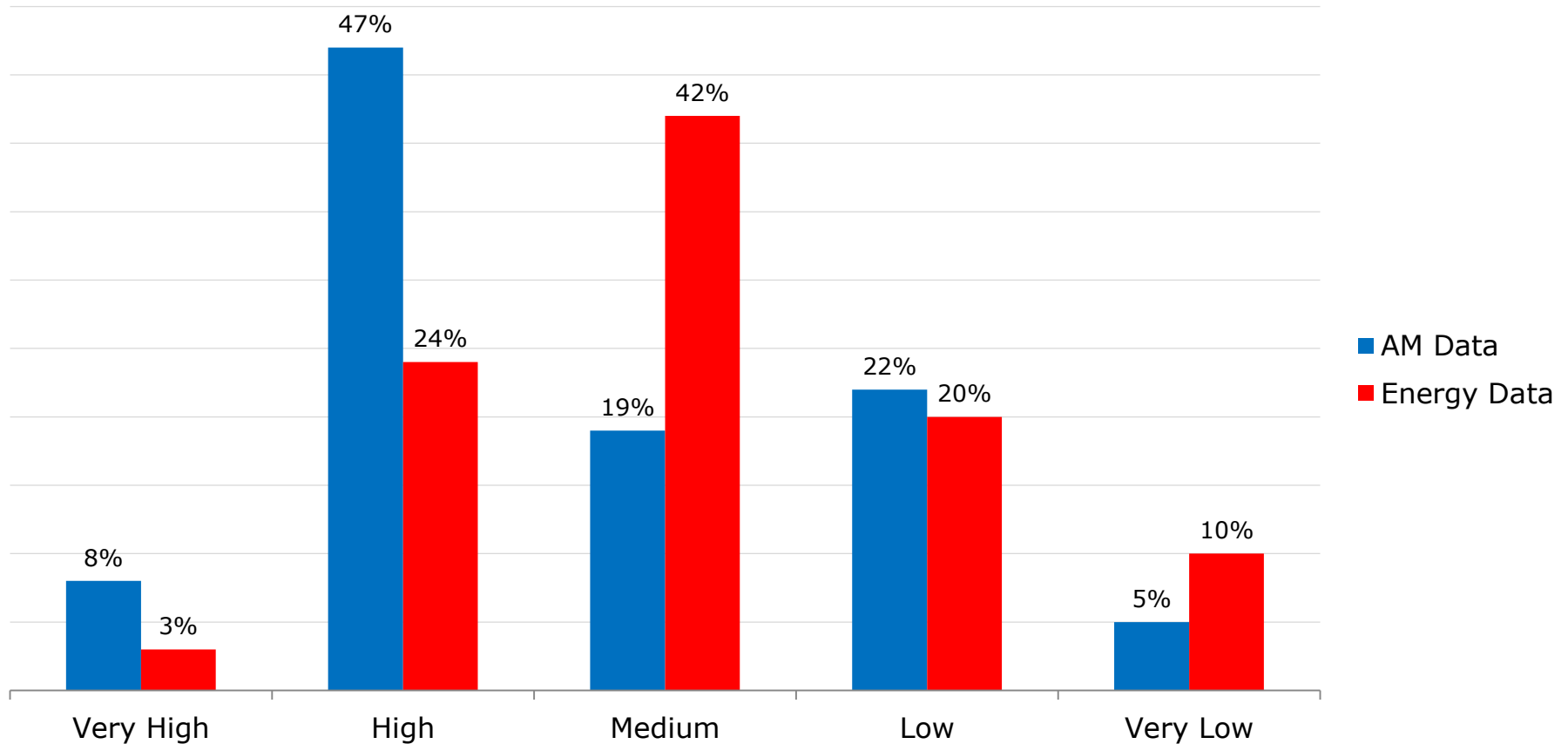
- Energy looked at in isolation, difficult to make a case
- Datasets not fit for purpose
- Not integrated, standalone, moment in time assessments
- Blind blanket approach that doesn't consider other objectives/wider activity

Data Silos



Data confidence

RP perceptions of the quality of asset management data...



NEF/Capita social housing sector survey, Summer 2016 (171 responding RPs)

NEF iAIM Project

- An Integrated approach to Asset Information Management (iAIM)
- 12 month feasibility study project subsidised by InnovateUK
 - Supply Chain Integration in Construction Competition



Primary R&D areas

Delivery, best practice, setting of benchmarks

Optimised surveys, audits, monitoring + guidance

Asset optimisation

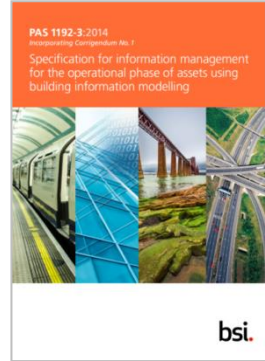
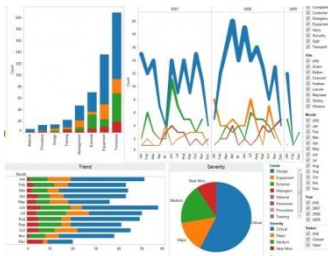
Data Capture

Data processing

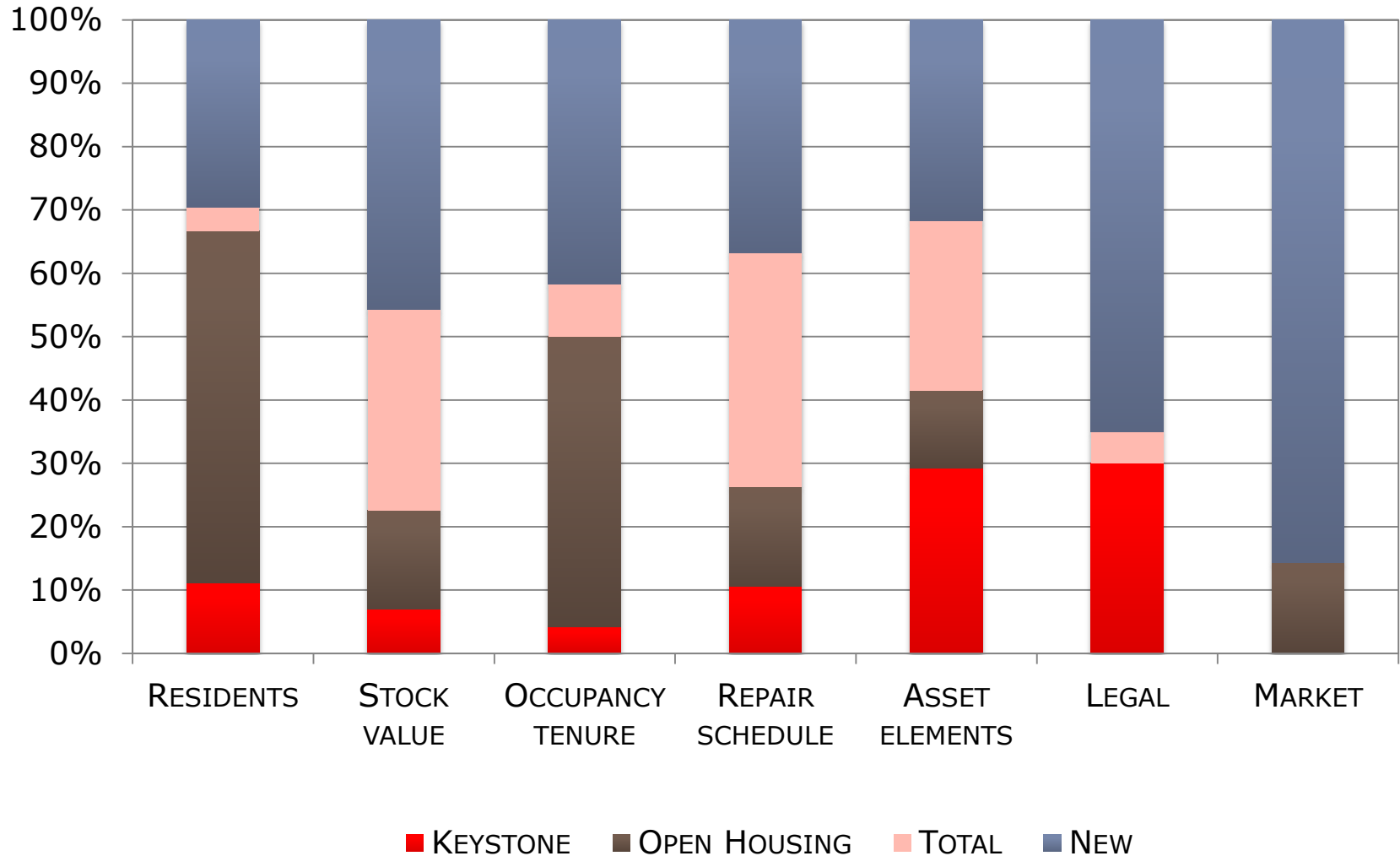
Data handling/storage

Social, Environmental, Economic impact modelling and risk appraisal

Guidance on field setting, inference, auto completion. Integration with existing AM software providers



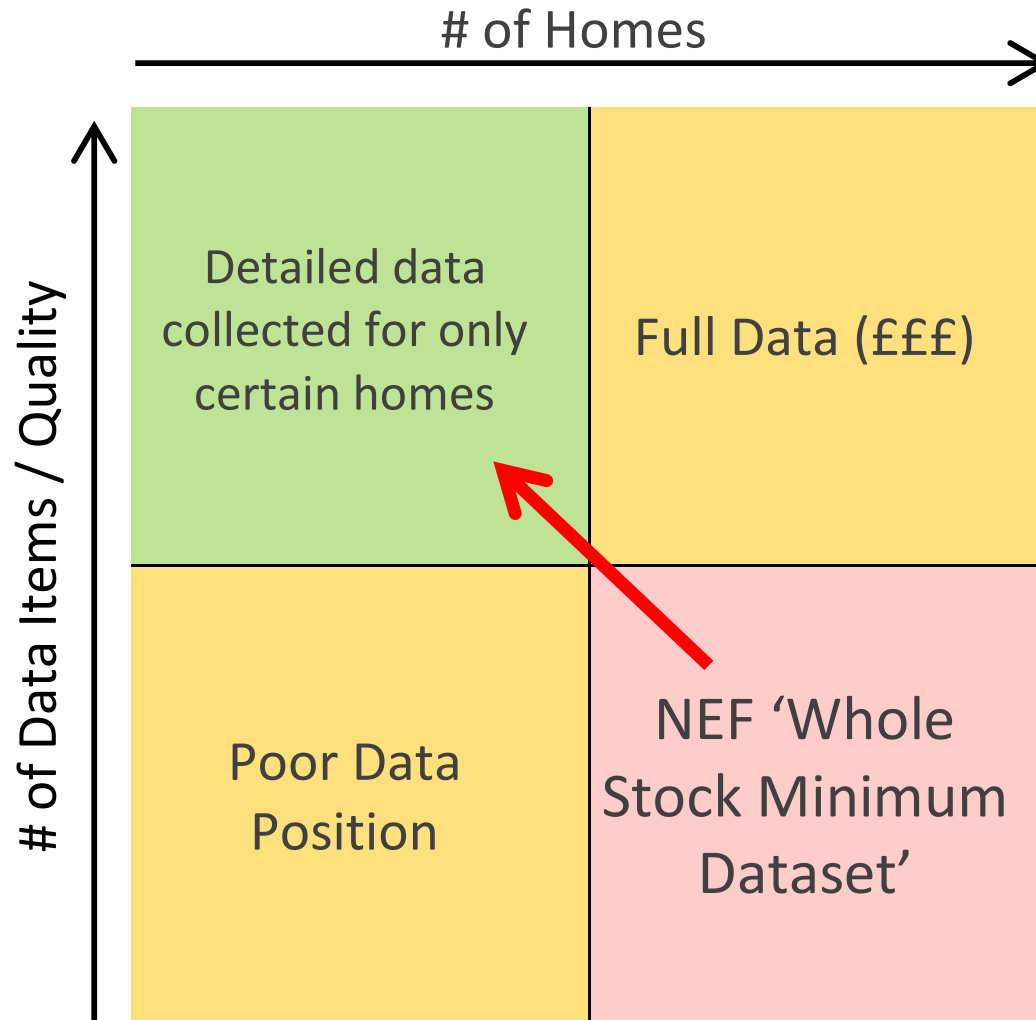
Making the business case



What do we want from data?

- How do our assets currently perform? Biggest risks?
- What are our options? Actions we can take?
 - Invest – energy performance, HHSRS, repair/replace?
 - Divest – private sale, RTB?
 - Demolish and re-develop? New build?
 - Improve resident experience – e.g. provision of support, advice, guidance?
 - Invest in neighbourhood/streets/infrastructure?
- How do we target and prioritise investments?
- Where do we require more data/insight?
- Impacts? Costs? Benefits?

Whole-Stock Minimum Dataset



Tool calculation modules

Financial

Affordability

Profitability

Social

Desirability

Health

Crime /ASB

Neighbourhood
Stability

Environmental

Impact ON

Energy
efficiency

Impact FROM

Summary

- NEF is exploring numerous market and technology driven opportunities to innovate – data collection, handling, processing and investment decision making
- ‘NEF Compass’ Investment Decision Making Tool
 - Set priorities, compare key performance indicators side-by-side, appraise ‘what if’ impacts, more targeted detailed data gathering and investment decision making. We acknowledge energy is only part of the picture!
- Keen to work with RPs and others interested in testing and adopting new approaches to asset information management and stock analysis.



Thank you

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