

Approach to Developing an Enterprise Information and Data Strategy

David Vaz

Data Governance and Stewardship, National Australia Bank Limited



Practitioner Track Organized by

IQ International

22nd Annual MIT International Conference on Information Quality

MIT ICIQ 2017

October 6 - 7, 2017. Hosted by the University of Arkansas at Little Rock



ICIQ 2017

Approach to developing an enterprise information and data strategy

ABSTRACT

There are numerous hurdles in developing an enterprise wide data strategy. Senior management buy-in is needed to ensure sponsorship. Widespread engagement is needed to ensure breadth of acceptance and adoption. At the same time, the topic of "data" is nebulous: technical complexity is significant; language is poor; the issue is often perceived as "too big"; even framing what is meant by "data strategy" can be fraught. National Australia Bank Limited (NAB) achieved sign off in 2014 for an Information and Data Strategy which received enterprise wide support, which has been twice reaffirmed, and which continues to be executed against.

This discussion will cover:

- experiences and outcomes in developing an enterprise data strategy in a large financial organisation
- the defined process that was deployed to develop the strategy
- discussion on merits and drawbacks of the approach used
- reflections of how the process could be improved

CONTENTS

- **Setting Context**
The Information Journey NAB has been on.
- **Developing the Strategy**
Overall approach and process to build
- **Phase I – Why does information and data matter?**
Process, analysis and key outputs
- **Phase II – Strategy development**
Validation and the core strategy created
- **Reflections**
Insights, lessons and possible improvements
- **Questions**

WHO IS NAB?

Approximately 10 million customers globally

10,000,000



KEY PRIORITY

HELP OUR CUSTOMERS SUCCEED. GIVE THEM A GREAT EXPERIENCE.



ESTABLISHED MORE THAN 150 YEARS AGO



NAB GROUP SNAPSHOT

Financial results

All figures in Australian dollars (AUD) unless otherwise stated.



GLOBAL FOOTPRINT

with offices and subsidiaries across Australia, New Zealand, Asia, the United Kingdom (UK) and the United States (US)



APPROXIMATELY
35,000
EMPLOYEES²

NAB WON BANK OF THE YEAR

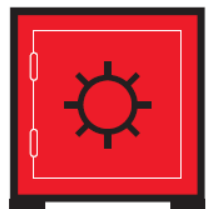
at the 2016 Financial Review Smart Investor Blue Ribbon awards, for the fourth year running



Cash earnings³
\$6.48B



Statutory net profit³
\$352M



RANKED 22ND

overall
among
World's
Safest Banks¹



Cash
ROE³



Banking
cost to
income
ratio⁴

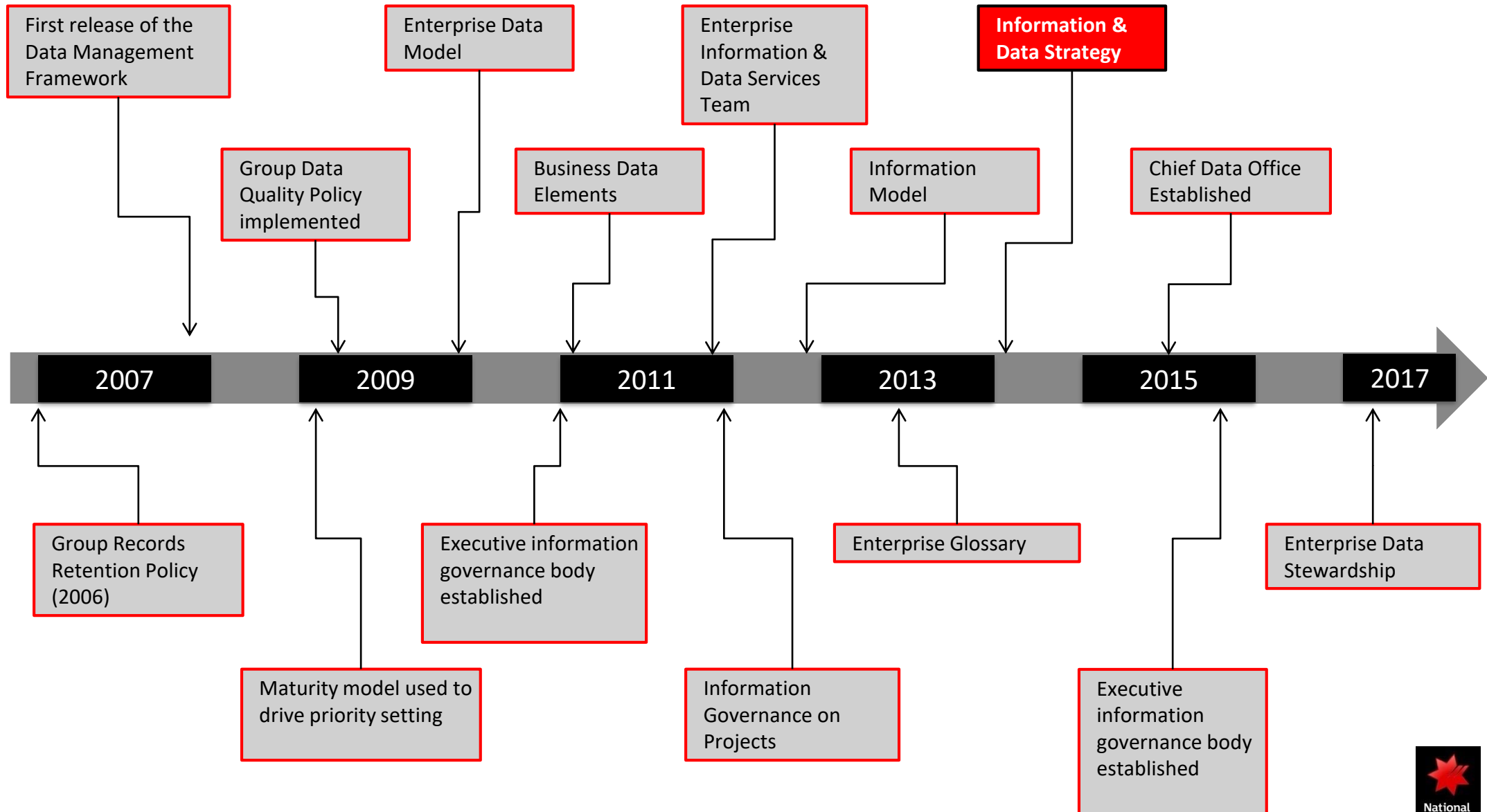


Tier 1
common
equity
ratio³



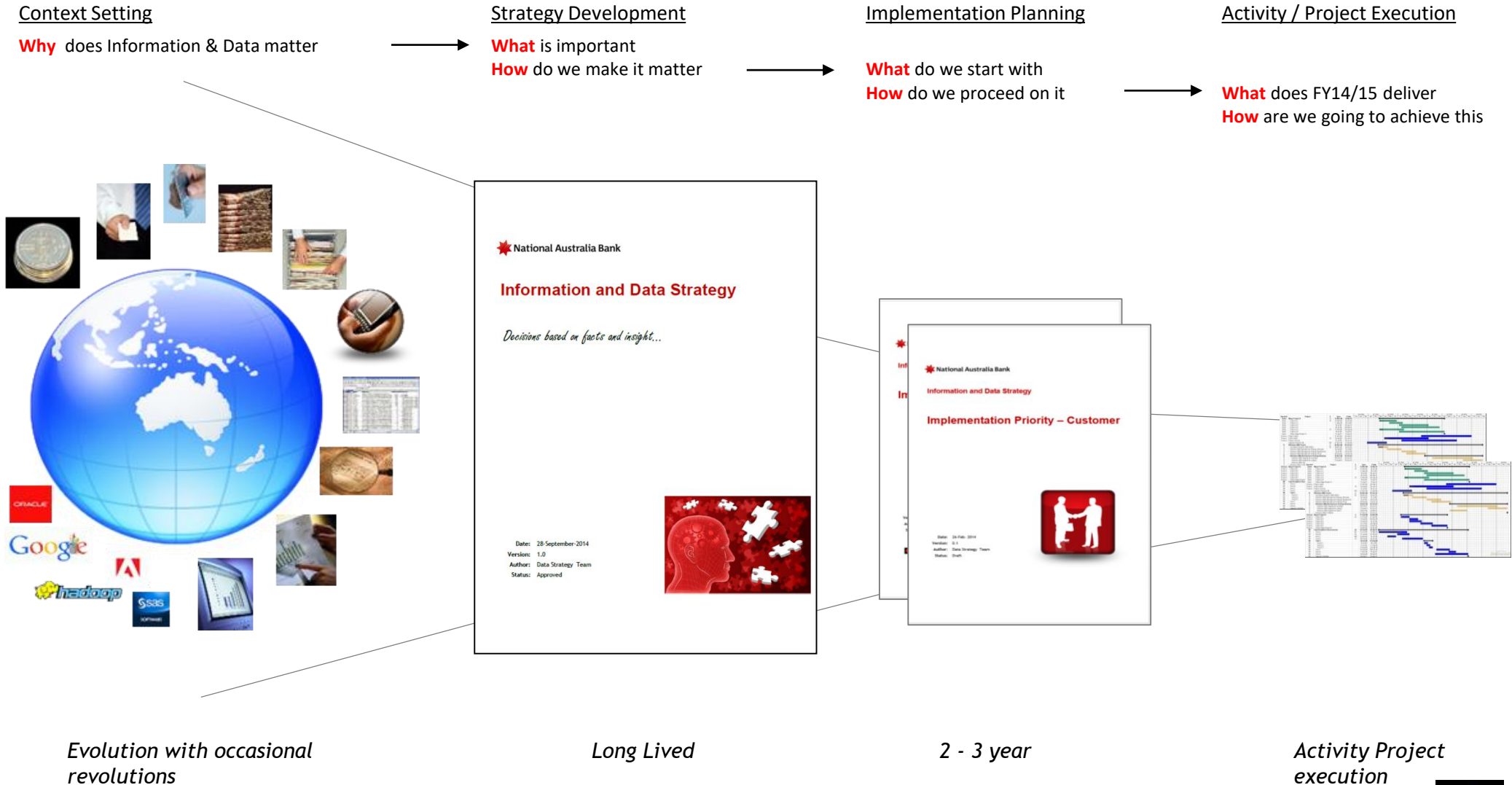
TEMPORAL CONTEXT

Development of the Information and Data Strategy is part of a longer journey of Information Management maturity.



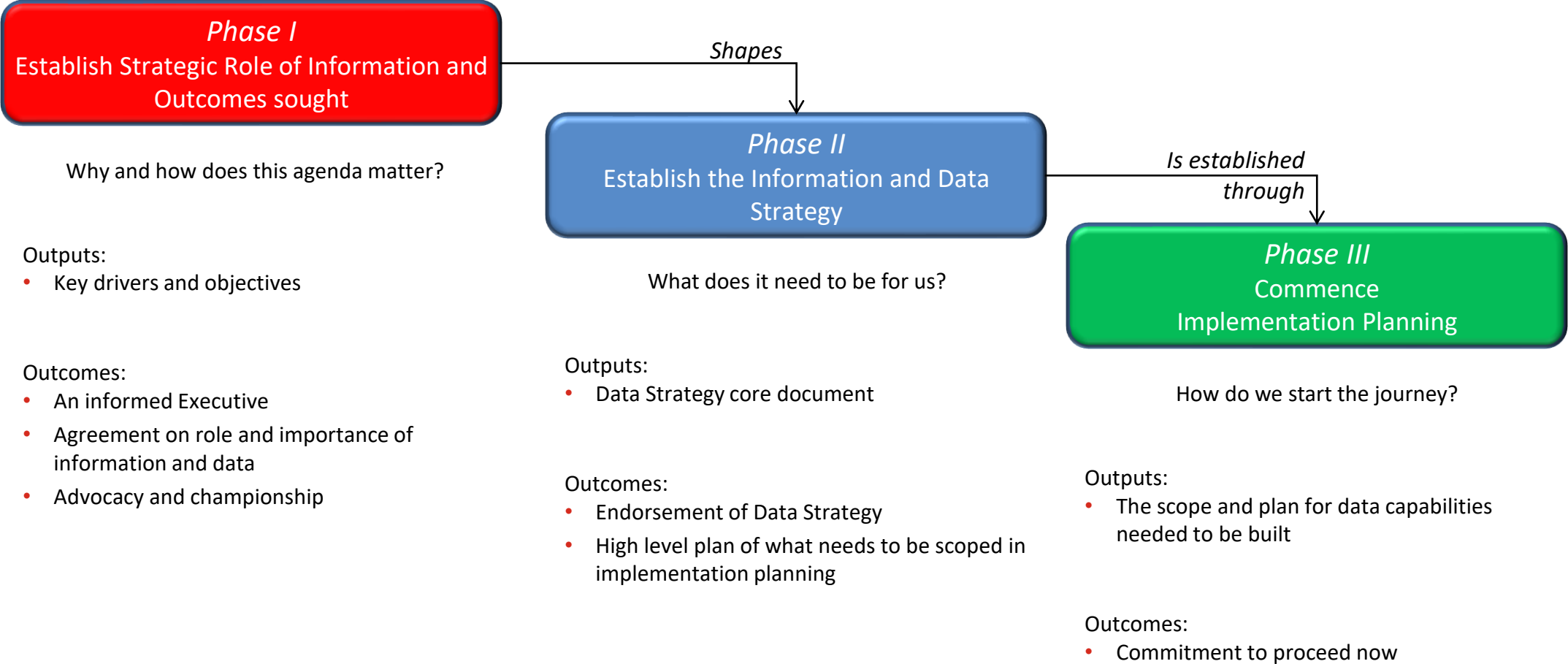
STRATEGY DEVELOPMENT – OVERALL APPROACH

The strategy development cascades. We start with the Why. The How of one component drives the What of the next.



DEFINING A PROCESS TO BUILD

Specific outputs and outcomes defined for each Phase. Today's discussion deals with Phases I and II



PHASE I PROCESS

- 18 Executives identified, for each:

- Questionnaire

- What are the key priorities / strategic agenda in your area?
- How is that agenda dependent on data?
- To what extent do you think issues and challenges in data might present hurdles and opportunities to your agenda?

- Interview

- 1 hour
- 2 staff (interviewer and note-taker)

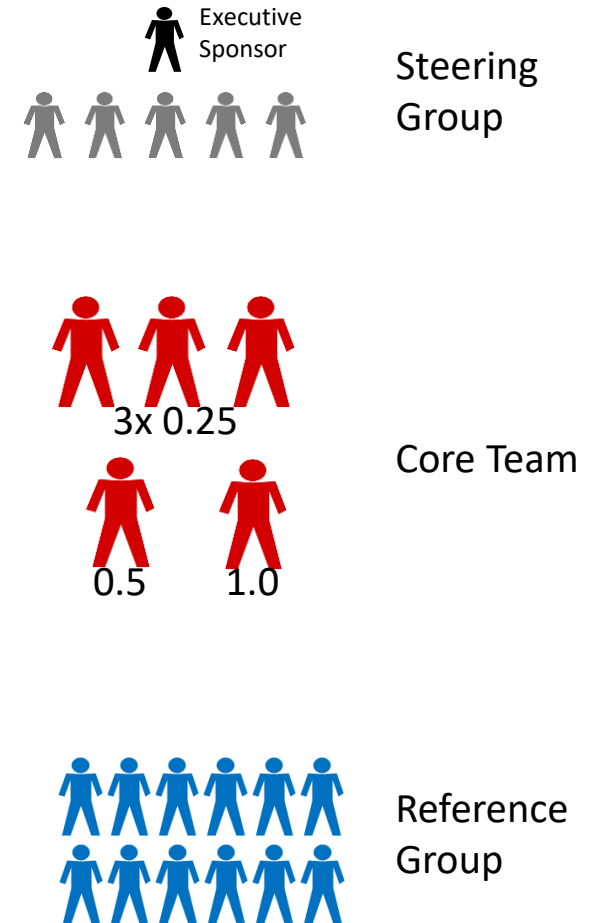
- Write-up

- Transcript written (~1500 words) with a key point summary
- Feedback solicited

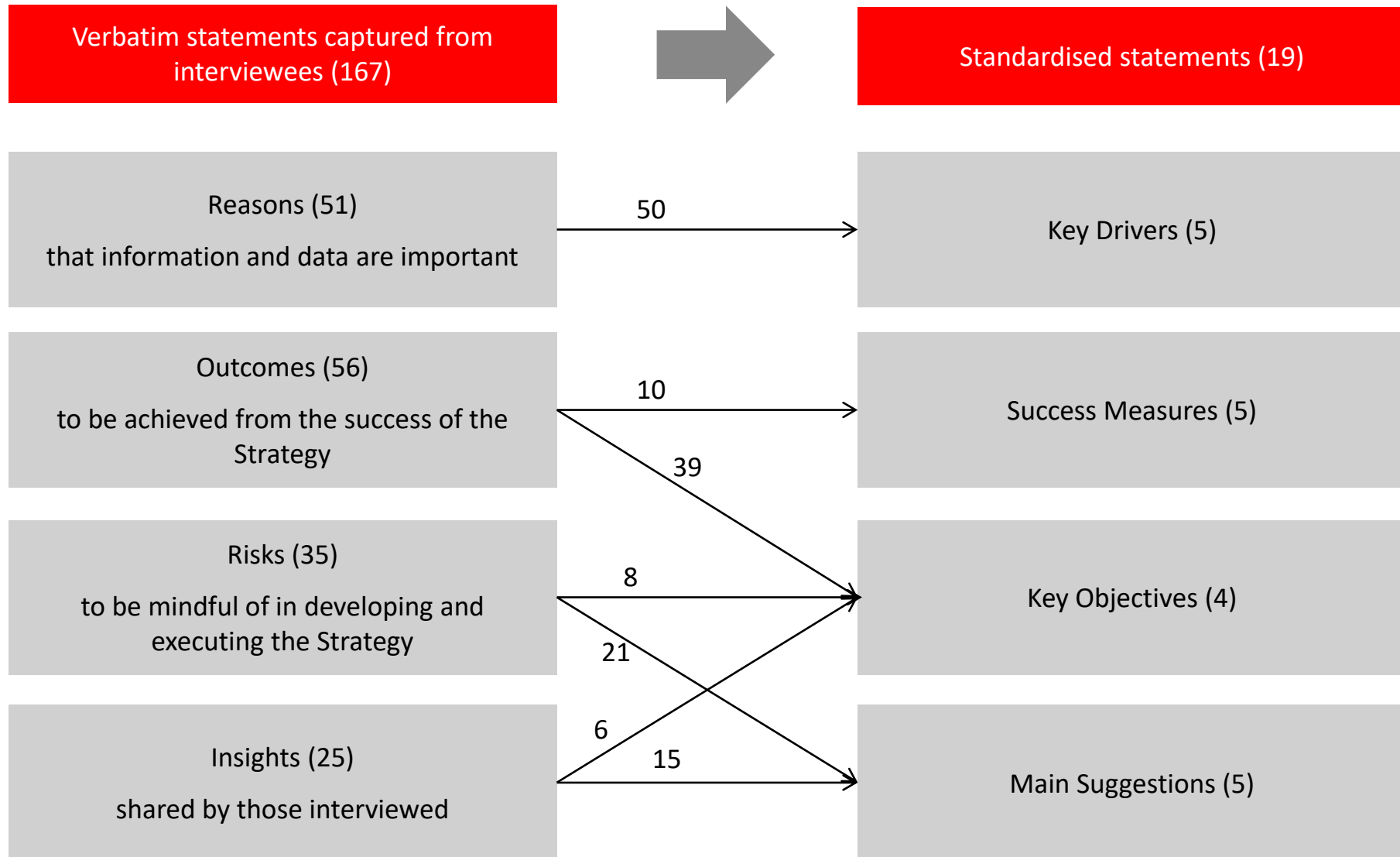
- Synthesis

- Analysis of transcript statements

- Consolidated view



PHASE I ANALYSIS



PHASE I – KEY OBJECTIVES

Driving fact-based decision making

- “Quality decisions rely on accurate data and quality decisions are by their nature value accretive. We need to drive the organisation to provide the fact base for these decisions.”
- “The balance sheet is getting tighter and NAB will not know which choices to make unless it has sufficient quality data at hand.”
- Exploit the insights once confident you are dealing in facts.”
- “The best product managers are the best data interrogators.”
- “We need the means to understand the ROI over data so that we can invest commercially in both quality and analysis.”
- “Better data leads to better decisions.”

Growing importance of analytics

- “We need to move from trying to “out execute” to “out think” which relies on information and its use as a differentiator.”
- “The fact that I didn't win it is as important as the data on the business I did win.”
- “... significant step-up in business intelligence and fully understand the robustness of our business information.”
- “We ... fail to draw reliable insights to run our business.”
- “NAB must be able to take a bigger picture view and a longer term view.”
- “It is important that there is a way to provide the insight in a manner that can be actioned by brand proposition.”

Changes in the operating model

- “The functional model requires a well-defined process and information flow to deliver the exchange of accountability inherent in the model. This needs systemic underpinnings.”
- “It is actually an information flow problem, and ensuring that the correct and efficient flows occur is key.”
- “We should use data to run our business, supported by fact-based decision making.”
- “The functional model requires reliable data on the business.”
- “We have to find an operating rhythm that is built around fact-based choices and decisions.”

The changing environment

- “Digitization is changing the importance of information.”
- “The ability to trace individual's movements in the Digital world is unparalleled... Using [this] capability...to better target a prospect is both a huge opportunity and threat.”
- “We must embrace the strategic advantage that data analysis and data driven decisioning will bring... or risk being left behind.”
- “Better insights and behavioural analysis will be required in the future.”
- “... [nabTrade and Ubank] see a large element of Customer “tracking” as critical to the future of the online business model”
- “Our customers will need [real time offer services]... if we don't provide this as part of the overall service we risk disintermediation.”

Success of the Game Plan

- “All aspects of Win Today/Win Tomorrow have a key data dimension that needs to be the focus of our data efforts.”
- “Transformation, Simplification, fixing big ticket issues ... all require good quality, trusted data to be successful.”
- “Data is core to our business. We are not using it well enough.”
- “We are wasting time and money repairing data errors and issues.”
- “Foundational hygiene factors such as compliance, efficiency and quality [in data processes] are required to support the transformation agenda.”
- “We are not capturing information in a way that it can be modelled easily...a lot of time is spent in data cleansing. We need better capabilities with our information to address this.”

PHASE I – OBJECTIVES AND MEASURES

I. Change the *Culture*

- “We move towards a more fact based and transparent organisation.”
- “We have agreement to drive a cultural ‘data quality matters’ non-negotiable from within the divisions.”
- “We have a culture of sharing information.”
- “We have trust and confidence in the information used and we use it consistently.”
- “We recognise that data will drive the future success of financial services globally.”

II. Apply *Disciplines*

- “There is consequence if I don’t do the right thing by the organisation.”
 - E.g. Careless data capture.
- “We are clear on roles...in each respective division.”
- “Decisions and trade-offs are made on an economic basis.”
- “We know what levers are needed and how to operate them.”
- “We optimise our resources and people to deliver the future strategy.”
- “We drive the right front-to-back wiring.”
- “All the divisional units have a clear idea of what data they need and why.”

Game Plan Outcomes Enhanced

- ✓ “Accuracy rises”
- ✓ “Costs fall”
- ✓ “BAU ops run more efficiently”
- ✓ “Customer experience improves”
- ✓ “ROE goes up”

IV. Exploit *Insights*

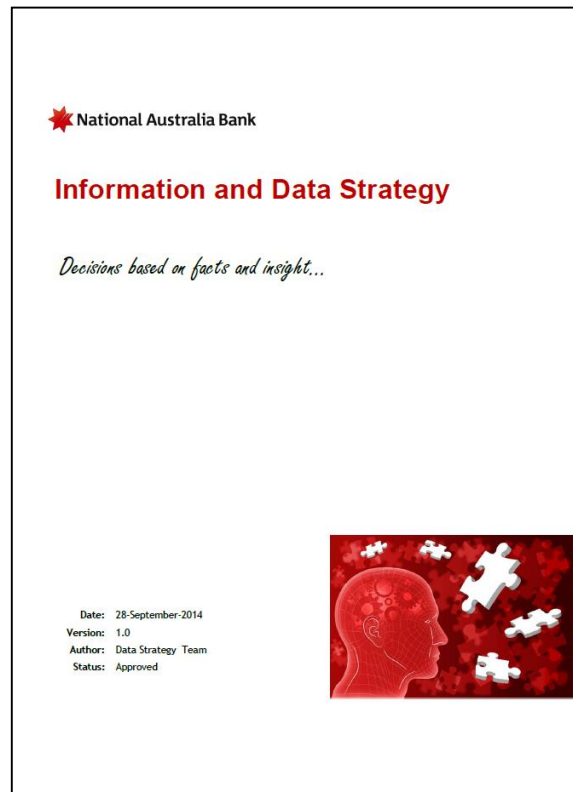
- “We and our customers are capable of better informed decisions in a number of key areas, leveraginginsights over data we already have.”
- “We have faster response times to important information requests; we drive and provide to rapid insight.”
- “We are able to answer the questions that we have not been able to answer so far.”
- “We have the capability to use data in business algorithms and scenarios.”
- “We create the value chain from data to actionable insight and are able to execute on those insights.”

III. Improve the *Ecosystem*

- “We clearly understand the foundations we need to build.”
- “Our data is standardised in terms of what it means, as well as through singular, consistent views of product and customer.”
- “Our data (and definitions) are accessible, accurate, timely and consistent.”
- “We have the “plumbing” we need to drive NAB’s outcomes in the simplest manner.”
- “A higher degree of STP is available to support Digital across the enterprise.”

PHASE II APPROACH

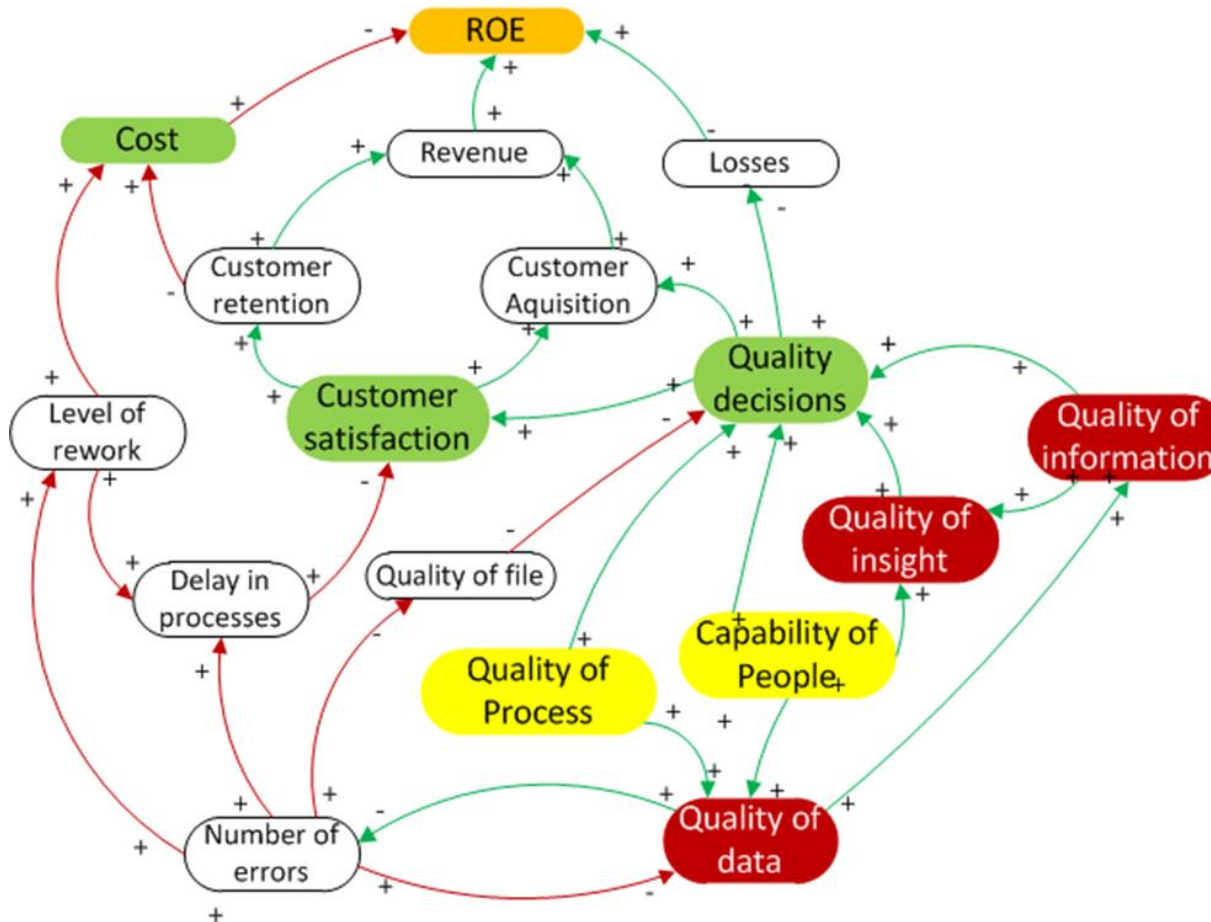
- Validate our understanding from inputs from Phase I using system mapping approach
- Develop the core Strategy document (30pp, 10k words)



- Purpose : Data and Information
- Principles: Givens and Choices
- Core directions we need to follow
- Core dimensions: **What** and **How** do we solve each
 - I. ...
 - II. ...
 - III. ...
 - ...
 - ...
 - IV. ...
 - ...
 - ...
- Initial Focus Points (current hypothesis)
 - ...
 - ...
 - ...

PHASE II ANALYSIS

We are an information business, so data, information and insight quality is incredibly impactful.



Note : Quality includes all dimensions including fit for purpose, timeliness and correctness

Key:
+ : More
- : Less

Green Arrow : Positive
Red Arrows : Negative

Outcome

Uplifted RoE

Benefit Providers

We are seeking three major outcomes
1. Reduce Cost
2. Increased Customer Satisfaction
3. Better decision quality

Key Information elements

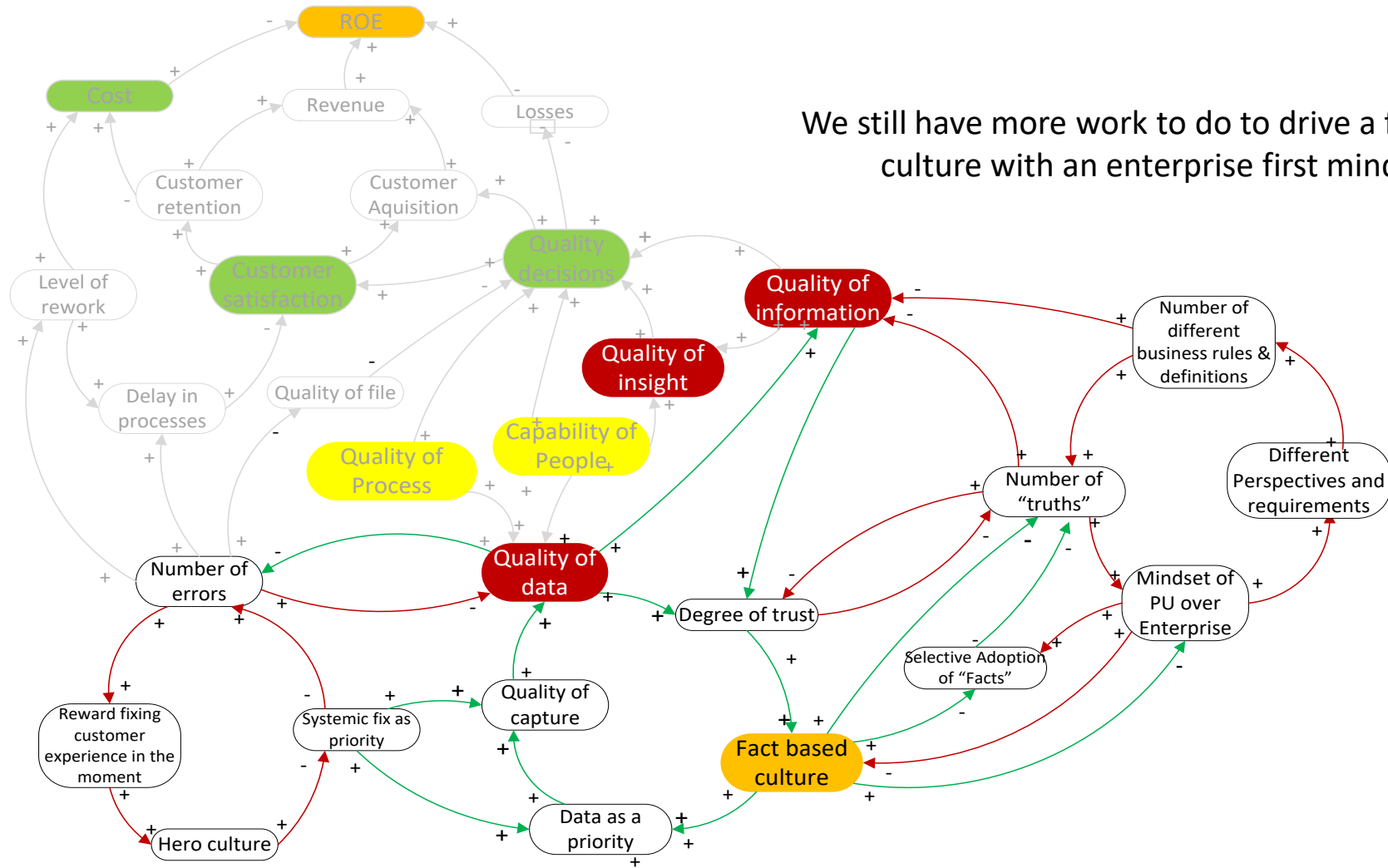
To achieve this we need to uplift
1. Quality of Data
2. Quality of Information
3. Quality of insight/analytics

Dependency

There is a key dependency throughout on the capability of our people.

PHASE II ANALYSIS

We are an information business, why then don't we treat data as a priority?



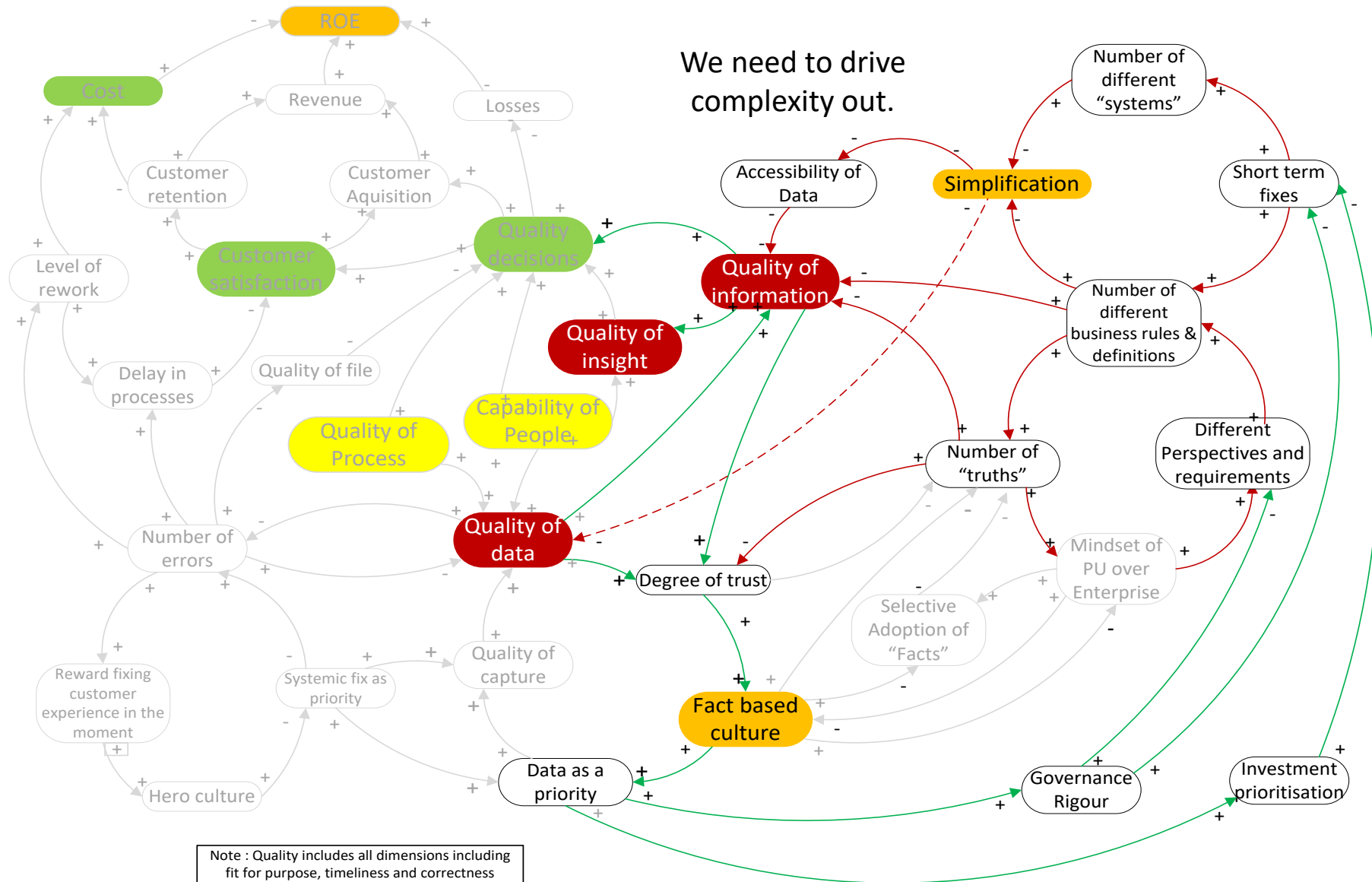
We still have more work to do to drive a fact based culture with an enterprise first mindset.

Note : Quality includes all dimensions including fit for purpose, timeliness and correctness



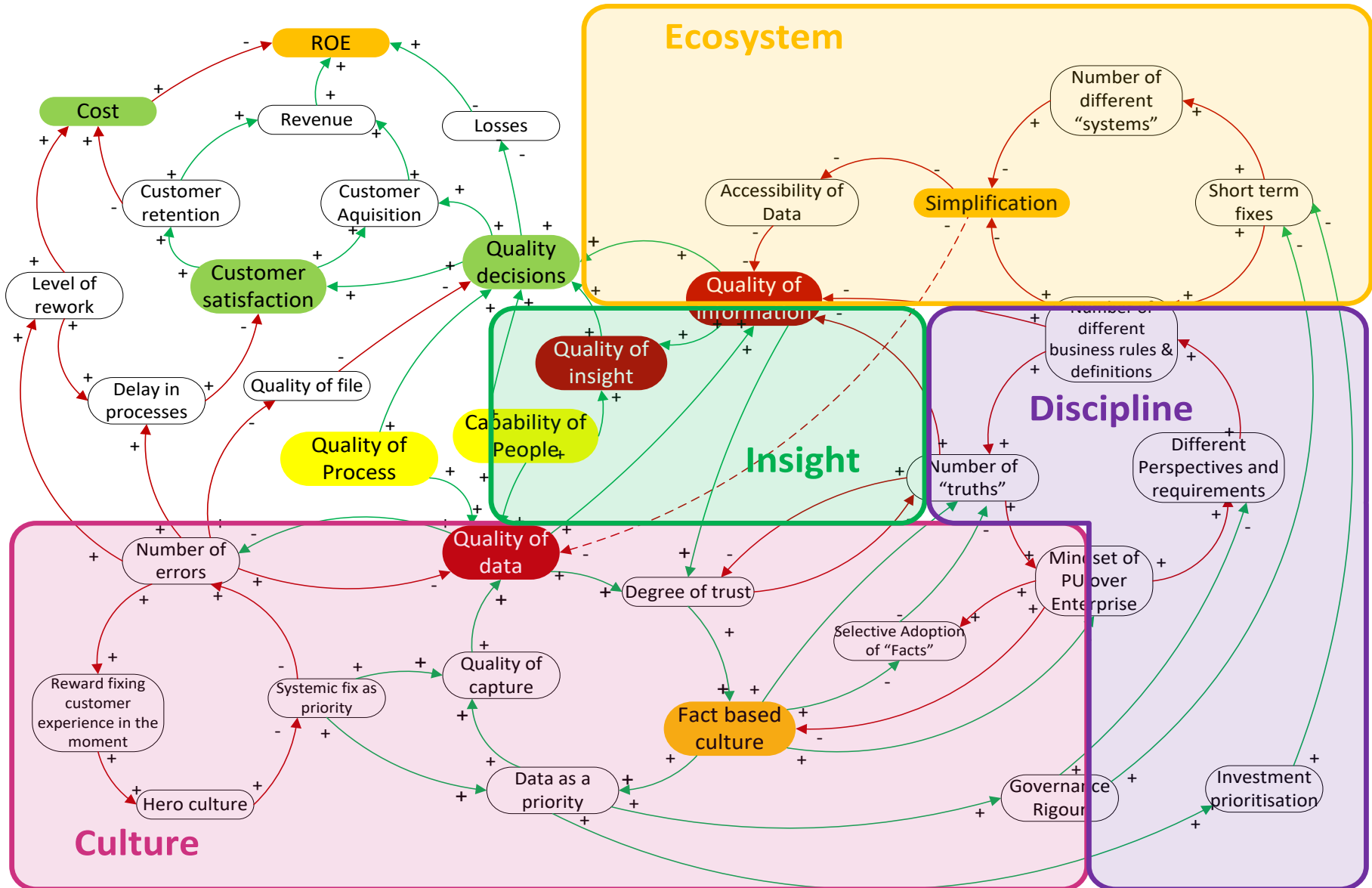
PHASE II ANALYSIS

What then should we do to address these challenges?



PHASE II ANALYSIS

We are an information business but have allowed great complexity to be established



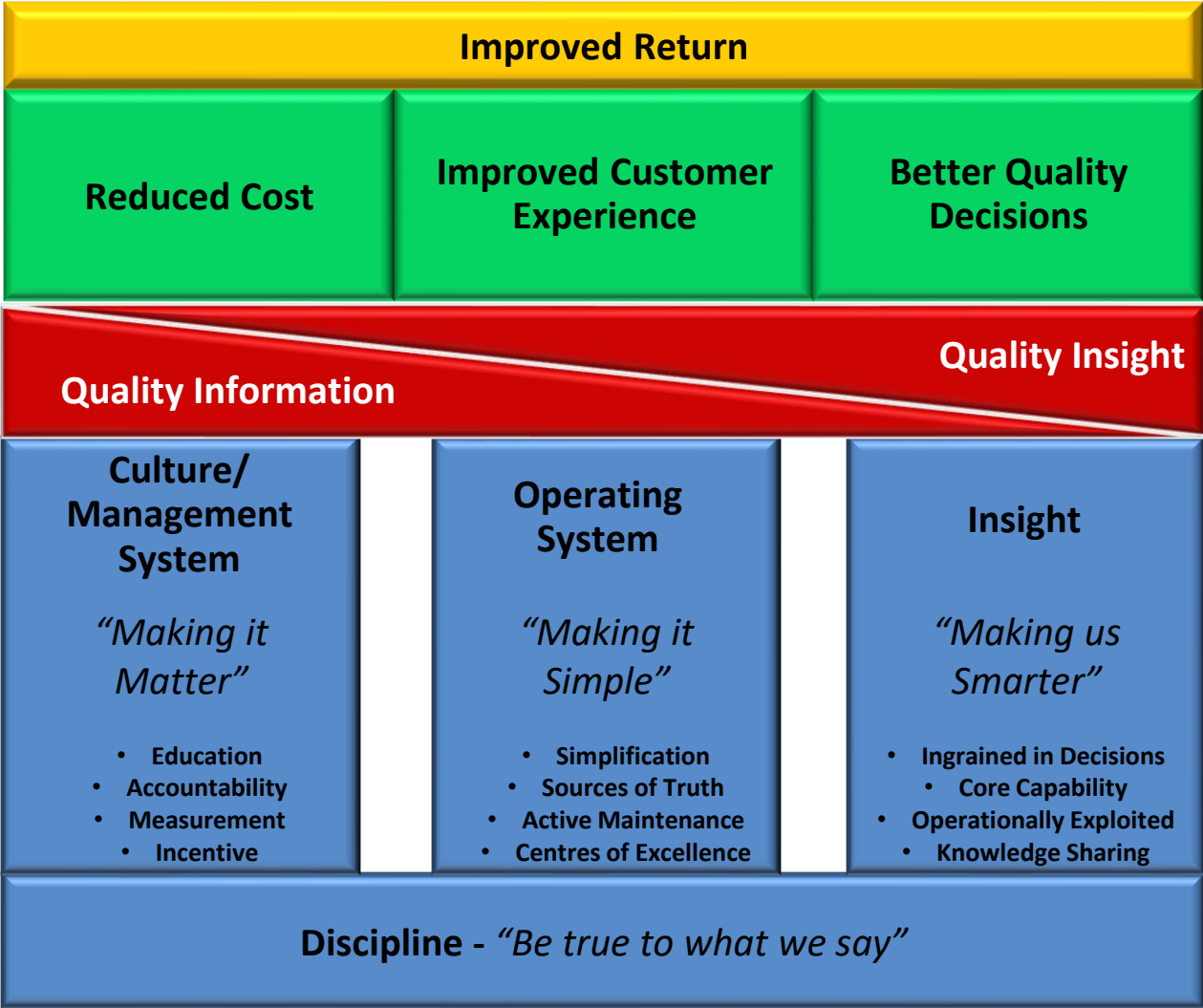
PHASE II – CORE DATA STRATEGY SUMMARY DIAGRAM

Outcome:

Because of:

Delivered by:

Made Possible by:

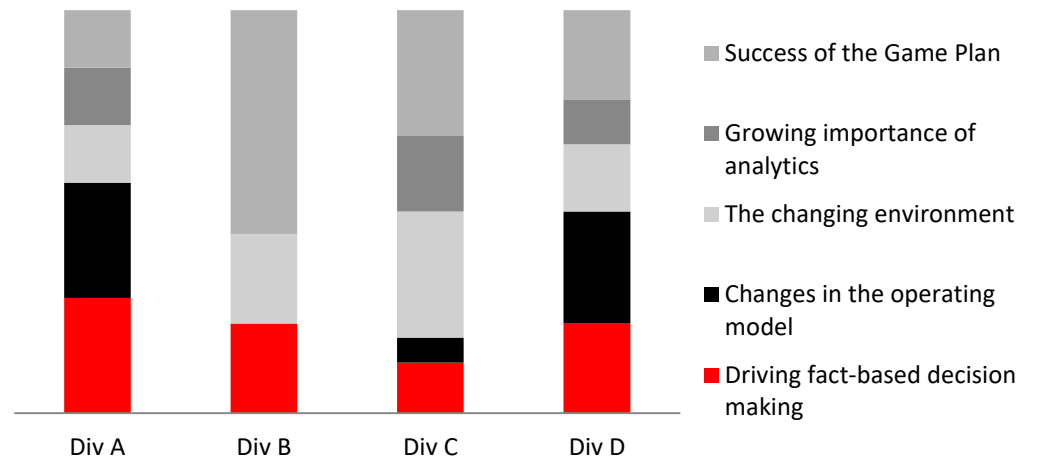


INSIGHTS, LESSONS AND POSSIBLE IMPROVEMENTS

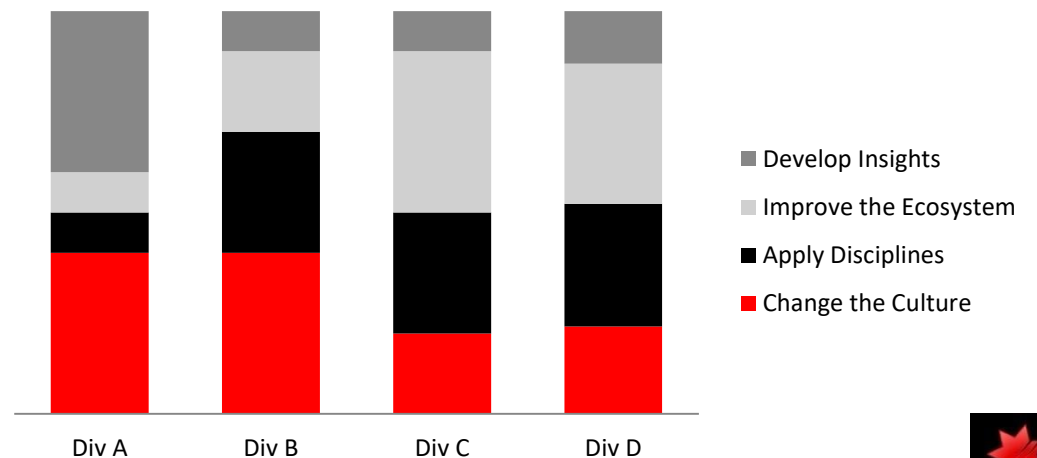
- The organisational context was a critical pre-condition to engagement.
- Potentially scalable to broader audiences.
- Process lends itself to thematic analysis (see right), which has subsequent utility:
 - in tailoring the awareness campaigns
 - in positioning drivers for deeper buy-in
- Role of the questionnaire was dubious. It was intended primarily as a thought provoker. Other tools / approaches may have been more effective.
- Lineage of captured statements to system map was not undertaken. This might prove interesting.
- System mapping benefitted from facilitation by a non data specialist.

Thematic Analysis

Drivers – Why this is important



Objectives – How to progress



THANK YOU!



QUESTION
S?

For any queries, please contact:

David Vaz
Data Governance
Office of the CDO
david.vaz@nab.com.au
+61 427 242 574