



pilbara



Grant Thornton

Full Cost Model Readiness and Pilot Implementation Guide

2020

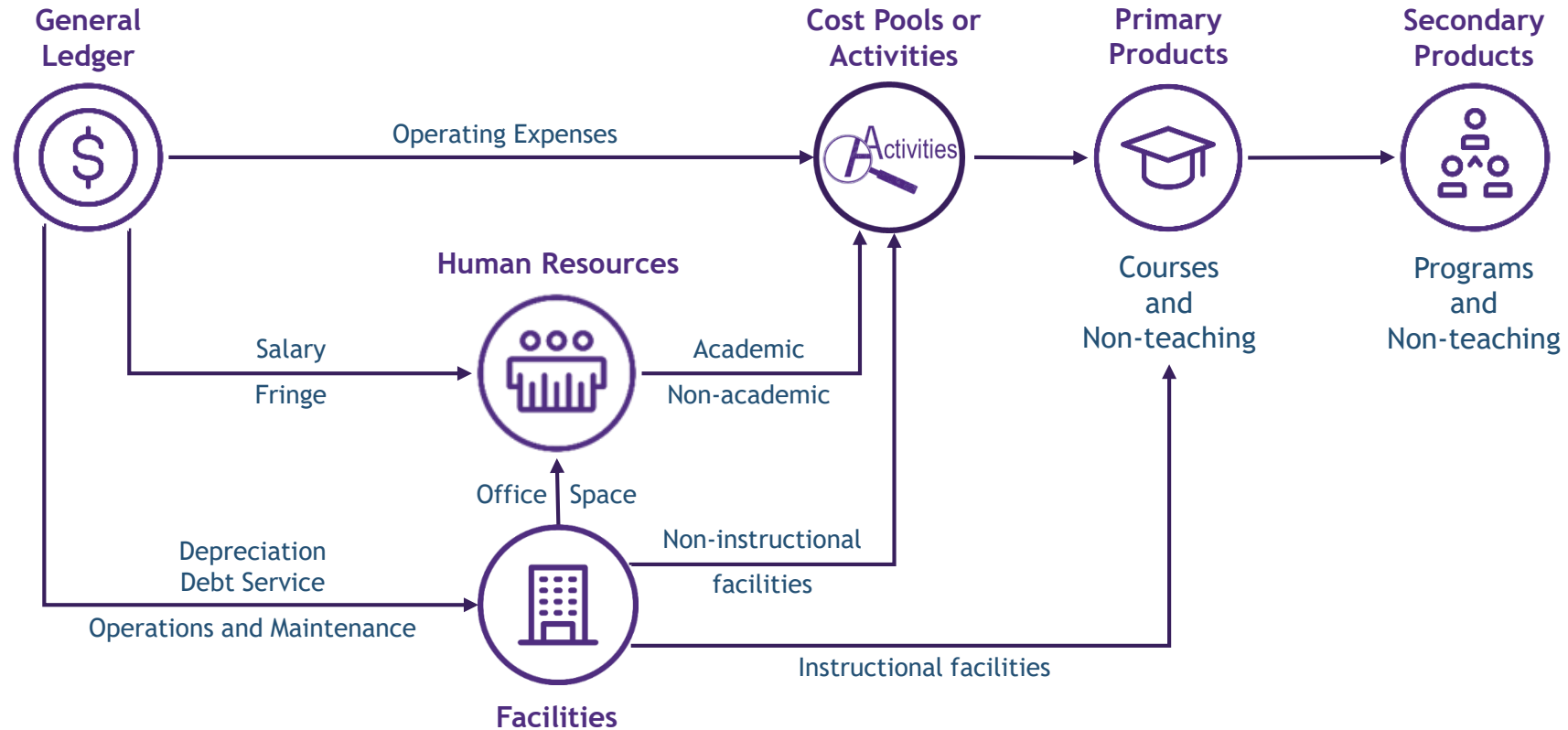


Full Cost Model Review

Process Considerations for Piloting Your Own Full Cost Model

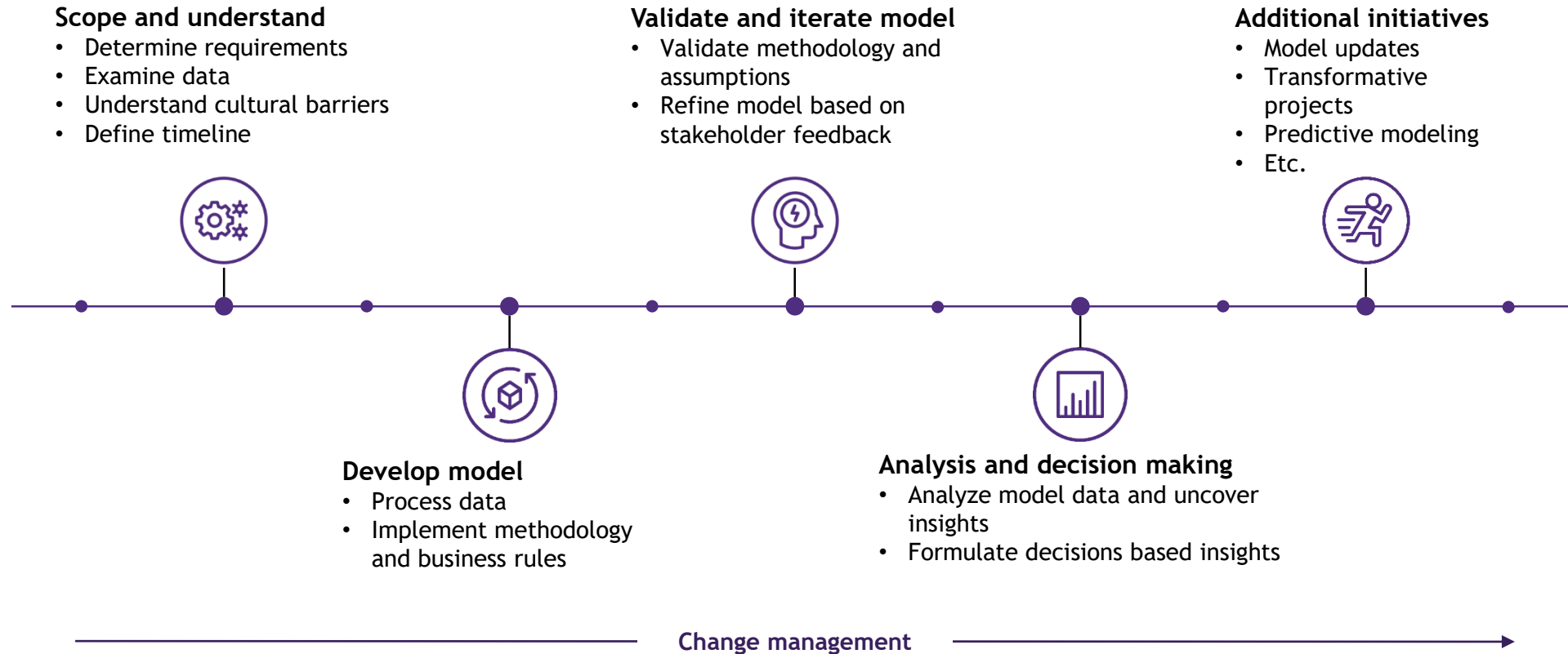
Activity-Based Costing (ABC) OVERVIEW

Baseline higher education methodology



Activity-Based Costing (ABC) OVERVIEW

Development process



Scope and understand

Understanding and communicating the need for ABC

UNDERSTAND AND COMMUNICATE NEED

Positioning ABC as a tool

Positioning ABC as a tool for academic resource management requires a shared understanding of how ABC will benefit your institution



What is ABC?



How will ABC benefit the institution?



Why is ABC being done?

UNDERSTAND AND COMMUNICATE

Key differences between faculty and administrators

Dimension	Faculty	Administrators
Governance	Collegial	Political
Culture	Teamwork	Rational
Climate	Developmental	Professional
Motivation	Institutional mission and goals, educational resources, and faculty development opportunities	Faculty selection and evaluation processes/criteria, faculty rewards

Differences between faculty and administrators are greatest at comprehensive universities and least at liberal arts colleges

Source: Peterson, M.W. and T.H. White (1992). Faculty and Administrator Perceptions of Their Environments: Different Views or Different Models of Organization. *Research in Higher Education* v. 33, no. 2.

UNDERSTAND AND COMMUNICATE

Strategies for engaging faculty and academic leaders

1. Work with deans first
2. Demonstrate how ABC will be aligned with and inform other decision-making processes
3. Be transparent
4. Focus on the immediate benefits of ABC
5. Acknowledge that ABC might be uncomfortable at first
6. Be persistent
7. Emphasize that administrative costs are a key part of ABC
8. Show how ABC can lead to better decisions

UNDERSTAND AND COMMUNICATE

ABC can and should...

- Be a collegial process
- Help assess fidelity to mission
- Help guide academic decision making, particularly around cross-subsidies
- Highlight how overhead use impacts academics
- Be a powerful tool for managing academic resources

Scope and understand

Assessing Data Readiness

ASSESSING DATA READINESS

- ABC provides one of the most challenging tests of data quality at an institution
- Before beginning an ABC project, institutions should assess the data readiness and address any weaknesses
- “Perfect” is not necessary but willingness to improve is

ASSESSING DATA READINESS

Data needed for ABC



Financial / General Ledger

- Expenditures by object code and organizational unit
- Revenues by source noting any restrictions on use



Human Resources and Payroll

- Salaries and benefits of all employees
- Faculty labor distribution (i.e., salaries and benefits amounts by source)
- Employee context (type, role/position, etc.)
- Full time equivalency (FTE) details



Facilities

- Space inventory and ownership
- Space usage (instructional, general, residential, etc.)

ASSESSING DATA READINESS

Data needed for ABC



Student data

- Student headcount and program/course enrollments
- Student tuition payments
- Student fee payments
- Student room and board payments
- Student financial aid



Timetable / Schedule

- Classroom to course section data
- Course section duration (face to face time)
- Instructional method
- Faculty course assignments



Activities

- Faculty effort by activity (workload profile)
- Effort required for reach course taught (course profile)
- Overhead activities / cost pools (developed)

ASSESSING DATA READINESS

Data needed for ABC

- Ideally, these data would come from an integrated ERP system
- In all likelihood, they will come from multiple systems and will need to be scrubbed and cross-walked
- Data need to be governed by reasonably consistent standards
- Some data will very likely need to be created

ASSESSING DATA READINESS

What if my data is not perfect?

- Don't avoid ABC just because your data aren't in great shape
- Developing an ABC model is a good way to improve data quality and advance good data governance
- Plan on a lot of initial scrubbing that you will eventually want to replace with formal data governance and improved system integration

ASSESSING DATA READINESS

Data quirks

- Even perfect data is going to have some quirks that need to be dealt with:
 - Cross-listed and team-taught courses
 - Co-PIs on grants
 - Accounting oddities like prior-year adjustments, write-downs, etc.
 - Activities that occur outside of the normal organizational structure (e.g., a president teaching a course)

Scope and understand

Building a data culture

Information is useless if it is not applied to something important or if you will forget it before you have a chance to apply it.

Tim Ferriss
The Four-Hour Workweek

BUILDING A DATA CULTURE

Your ability to make data-informed decisions also relies upon...

Data "Drivenness"



How routinely is data used to drive decision-making?

- Decision-making processes are based on key metrics that are tracked over time
- Data is available, understood, and used at all levels of the organization

Trust



How strong is the trust within your institution?

- Even with good data and metrics for decision-making, an institution's data culture can suffer if there is no trust
- Do not treat data as source of power or as a weapon
- Always communicate...even if it seems excessive
- Make sure everyone is aware of the values and intentions of stakeholders

Change



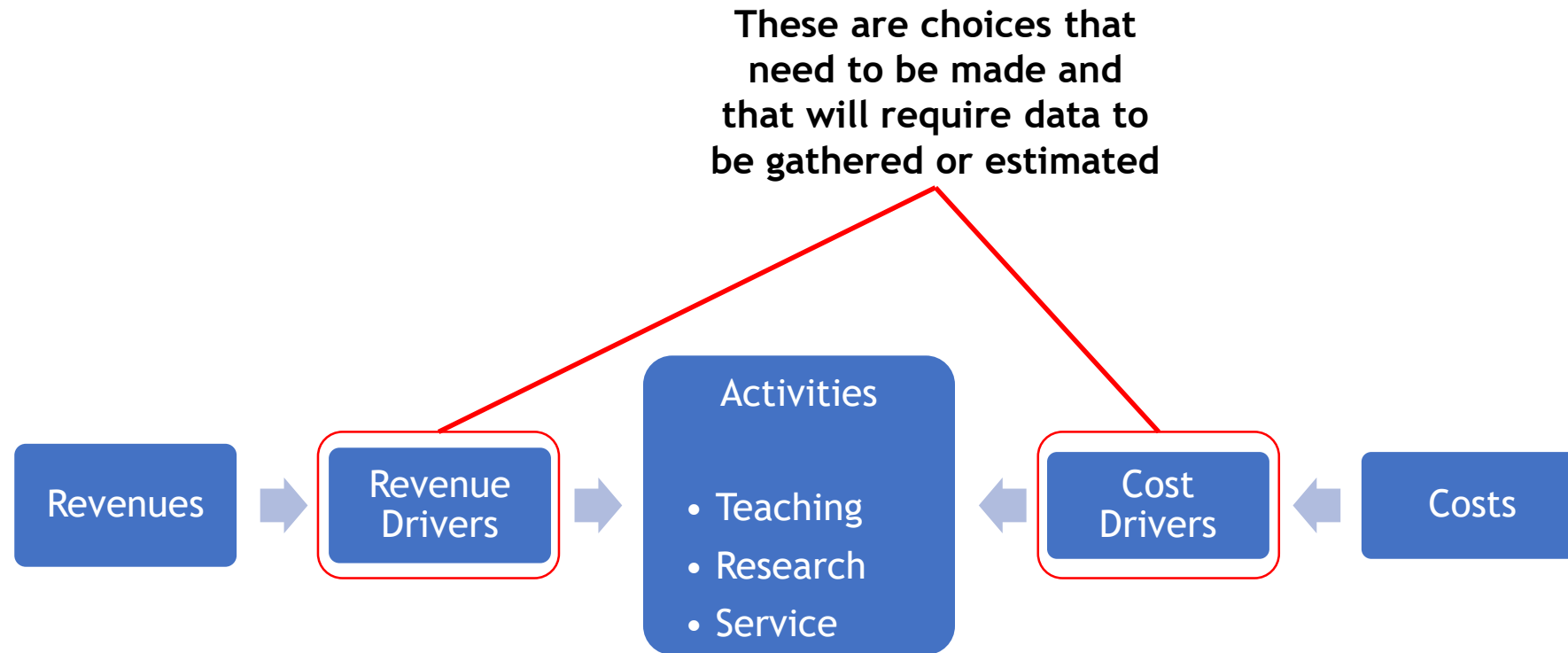
How willing is your institution to make/act on difficult decisions?

- Institution must be willing to commit to difficult change
- Have tolerance for bad news
- Respect different perspectives
- Commitment to academic quality and institutional integrity
- Don't see the world in terms of "winners" and "losers"
- Openly question assumptions
- Believe that people are truly listening
- Have a willingness to work with imperfect data

Develop Model

Building Model Assumptions

BUILDING MODEL ASSUMPTIONS



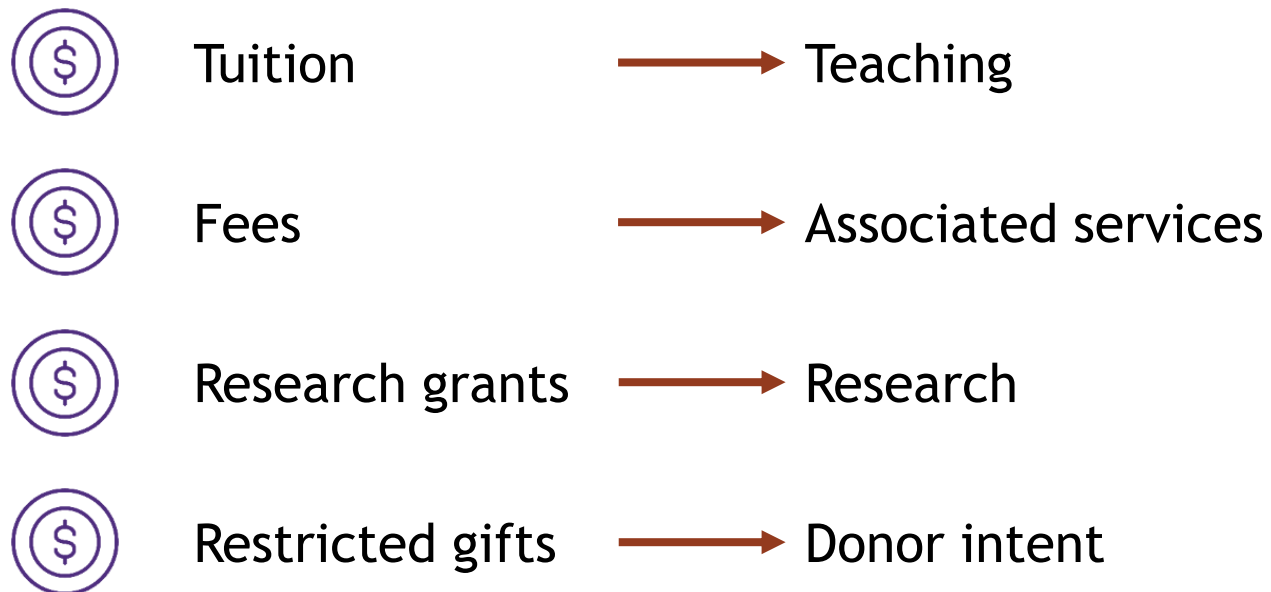
BUILDING MODEL ASSUMPTIONS

Basic assumptions that need to be made

- Organizational structure
- Accounting period
 - Matching academics to finances
 - Summer session expenses vs. activities
- Outputs to be costed
 - Typically teaching, research, and service, but...
 - Should also include auxiliaries

BUILDING MODEL ASSUMPTIONS

Revenue allocation in ABC



Where possible, revenues should be associated with the activity that generates them

BUILDING MODEL ASSUMPTIONS

Allocating tuition in an ABC model

Allocating tuition revenues is a straightforward process...right?



- Team taught courses?
- Service courses taught to non-majors?
- Students with multiple majors and/or minors?
- Discounts and revenue offsets from financial aid?
- Faculty advising?

BUILDING MODEL ASSUMPTIONS

Options for allocating tuition

Institutional Values	Considerations for Allocating Tuition
Access and affordability	Consider using average discounts instead of actual discounts on tuition to avoid penalizing programs with high-need students
Student success	Consider allocating some share of the tuition paid by non-majors taking service courses back to their home department
Avoiding course duplication	Consider allocating some share of the tuition paid by non-majors taking service courses back to their home department
Interdisciplinary effort and collaboration	Make sure that tuition allocation closely tracks each faculty member's effort in activities

BUILDING MODEL ASSUMPTIONS

Examples of other key assumptions that need to be discussed

- All drivers for allocating indirect expenses
- Allocating state appropriations and government grants
- Allocating unrestricted gifts and endowment income and gifts made to non-academic units
- Allocating revenues and expenses related to activities that span departments
- Course timetabling
- Costs of unused space

BUILDING MODEL ASSUMPTIONS

How best to make these assumptions

- Let the data be a guide
- Involve stakeholders
- Start simple and build complexity as needed
- Be flexible
- Use what you have but build for the future
- Experiment with different assumptions

Develop Model

Developing Your Timeline

DEVELOPING YOUR TIMELINE

Some facts about ABC model development

- ABC is generally driven by the fiscal year
- Iterative improvements tend to occur on an annual cycle
- You can prototype ABC on prior years' data
 - Results might not be as useful, but they are illustrative
 - They're also less threatening to skeptics
 - They help you build out historical analysis
- In-house development will take much longer
- An external partner can shorten the development time considerably

DEVELOPING YOUR TIMELINE

Approach #1 - Doing it in-house

Year 1	Year 2
Gather and clean source data from two fiscal years back	Share results with key faculty (e.g., faculty senate) for feedback
Develop preliminary model assumptions	Revisit and revise assumptions
Prototype ABC at school/college level	Gather and clean source data from prior fiscal year
Share results with deans, gather feedback, and revise assumptions accordingly	Re-run model with prior-year data and share results for feedback
Develop ABC at course/activity level	Provide data to decision-makers in budgeting process
Share results with deans and department chairs, gather feedback, and revise assumptions accordingly	Re-run models for the second- and third-to-last fiscal year with latest assumption and study trends
Gather and clean source data from prior fiscal year	Provide most recent ABC data and trend data to academic leaders for academic planning purposes
Re-run model with prior-year data and share results for feedback	Identify ways to automate data gathering/cleaning

DEVELOPING YOUR TIMELINE

Approach #2 - Partnering with a consulting firm

ACTIVITY	Scheduled Weeks												
	1	2	3	4	5	6	7	8	9	10	11	12	
Model Data Collection	■	■											
Deliverable 1: Scoping Study		■	■										
Deliverable 2: Create GL and HR Modules				■	■	■							
Deliverable 3: Create Program, Course and Facilities Modules						■	■	■					
Deliverable 4: Balanced and Reconcilable 1 st Pass Model								■	■	■			
Deliverable 5: Balanced and Reconcilable 2 nd Pass (Final) Model											■	■	
Source additional data as necessary			■	■	■	■	■	■	■				
Regular reviews to ensure optimal level				■	■	■	■	■	■	■			
Confirm / validate business rules as necessary				■	■	■	■	■	■	■	■	■	

Validate and Iterate

VALIDATE AND ITERATE

ABC is a journey, not a destination

- As a model, ABC is never perfect - it becomes more useful over time and with ongoing improvement
- If used correctly, ABC can be both a tool for decision-making and a conversation between different stakeholders in the institution
- It helps if stakeholders are willing to tolerate some degree of imperfection, especially at first

VALIDATE AND ITERATE

The iterative nature of ABC

- The first round of ABC is likely to identify:
 - hidden problems in your data
 - inappropriate or incorrect assumptions
 - the sheer complexity of the institution and model
- ABC is going to invoke some strong reactions from academic leaders, ranging from “I told you so!” to “That just can’t be!”
- These reactions are an important part of the iterative conversation and can be the source of model improvement

VALIDATE AND ITERATE

The iterative nature of ABC

- It is not a bad idea to have initial conversations using data from a few fiscal years back, enough in the past that people are a bit less vested in the results, but enough like the present to warm them up to what the model is telling them
- It is probably also best to keep the conversation limited to top leaders before trying to socialize results with a wider audience

VALIDATE AND ITERATE

The iterative nature of ABC

- Subsequent iterations benefit from better data, tighter assumptions, and greater acceptance of results
- Trend data becomes available over time and is particularly useful, since people can begin to see cause-and-effect relationships in ABC results
- As acceptance for ABC grows from the top down, more and more stakeholders can be part of the ABC conversation - thereby improving the overall model assumptions and results

KEY TAKEAWAYS

Don't wait for perfect data because you will never start

**Communicate, educate and involve all stakeholders,
particularly faculty**

ABC is as much about culture as it is about analysis

The ABC model is a means to an end...the point is the analysis

Just do it