

# UCR

## Time Driven Activity Based Costing (TDABC)

NCCI POWER 60s  
Professional Development Session

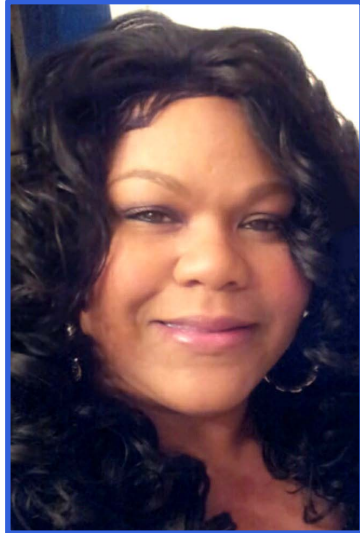
Presented by Tomika Coates, CCP

February 26, 2018

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# Presenter



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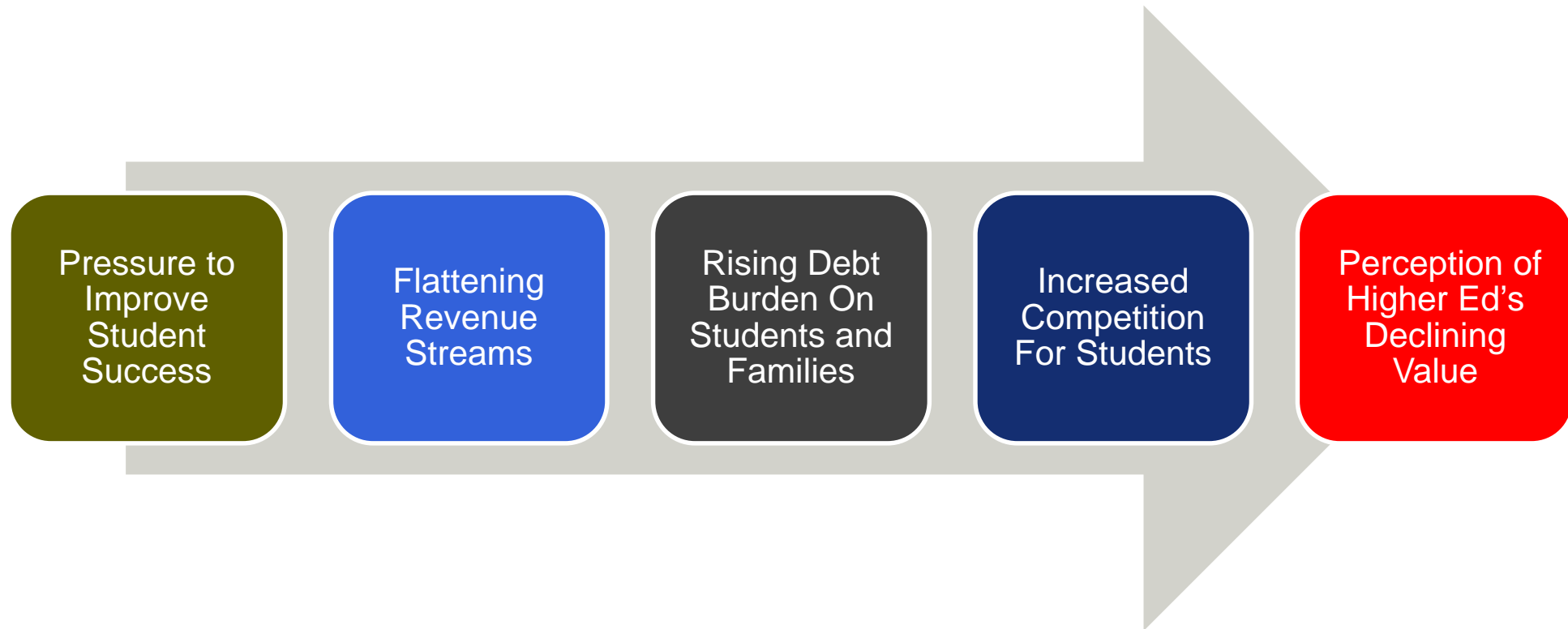
# Learning Objectives

Understand the value of Time Driven Activity Based Costing (TDABC) and how it can be used to help create greater transparency around activity cost

Observe the critical steps required to create a Time Driven Activity Based Costing (TDABC) model

# The Case for Change

Issues Impacting Higher Education Institutions (HEIs)



# Emerging Trends

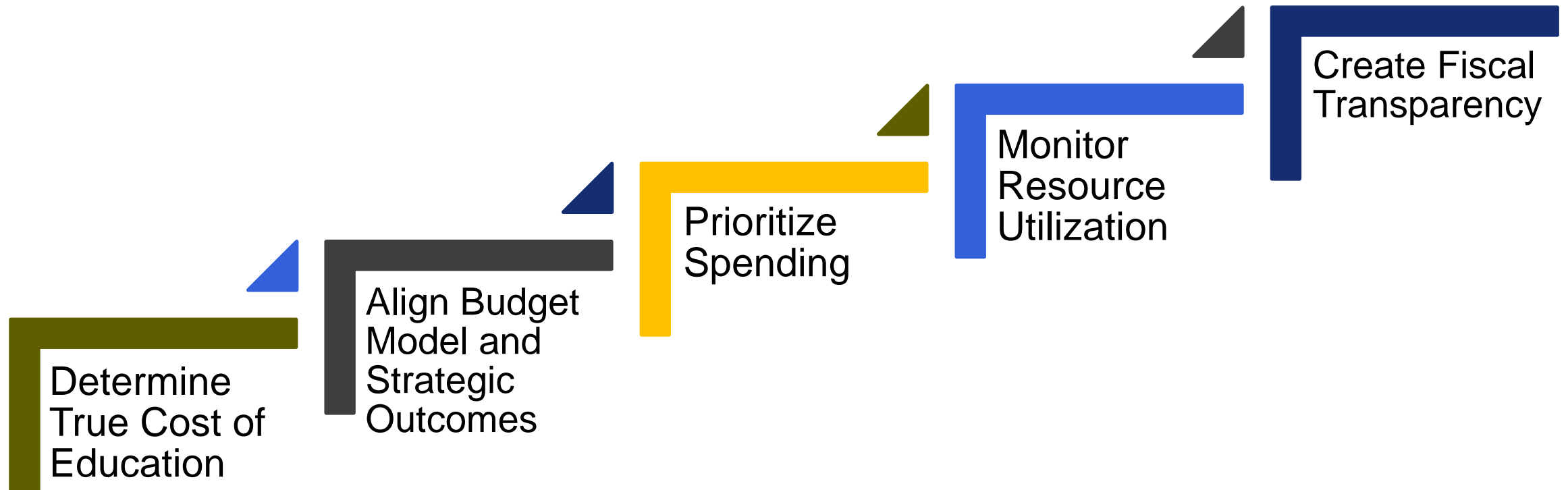
## Administrative Cost at HEIs

Support and administrative costs have grown faster than the cost of instruction across most campuses.

In no other industry would overhead costs be allowed to grow at this rate

# Call To Action

Increasing Fiscal Accountability for HEIs



# Transforming Administration

R'Shared Services' Integrated Strategy for Excellence



## People

- Liberate Structures
- Empower Staff
- Build Culture
- Embrace Scientific Thinking
- Coach for Improvement



## Processes

- Map Processes
- Measure Performance
- Remove Waste
- Improve The Work
- Sustain Results



## Resources

- Determine Cost of Capacity
- Estimate Unit Time
- Calculate Activity Cost
- Identify Cost Poor Quality
- Quantify Value of Lean



## Clients

- Understand Value
- Foster Engagement
- Establish Agreements
- Exceed Expectations
- Measure Results

**ACT WITH INTEGRITY IN ALL THAT WE DO**



# The ABC Difference

Traditional vs Activity Based Costing

## Traditional Costing

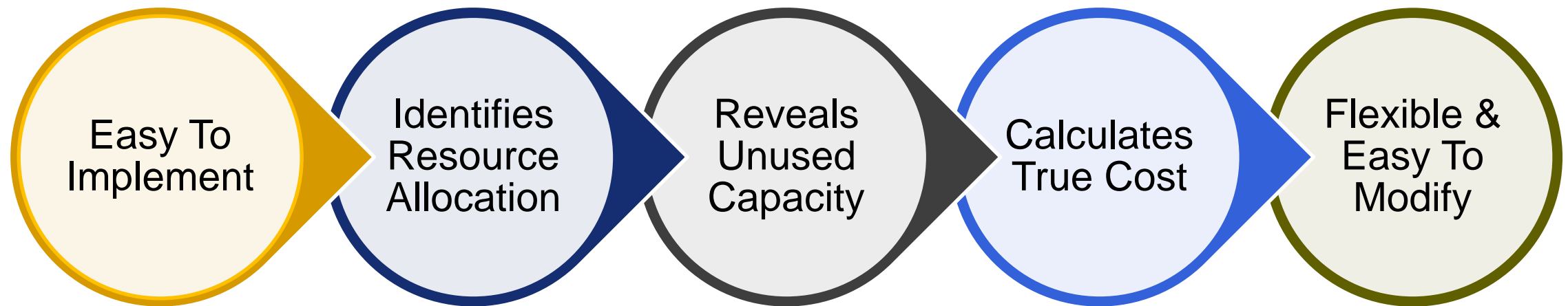
Revenues and expenses  
aggregated at the unit or  
functional level  
(ex. HR Department)

## Activity Based Costing

Revenues and expenses  
aggregated by the activities  
being performed  
(ex. Onboarding)

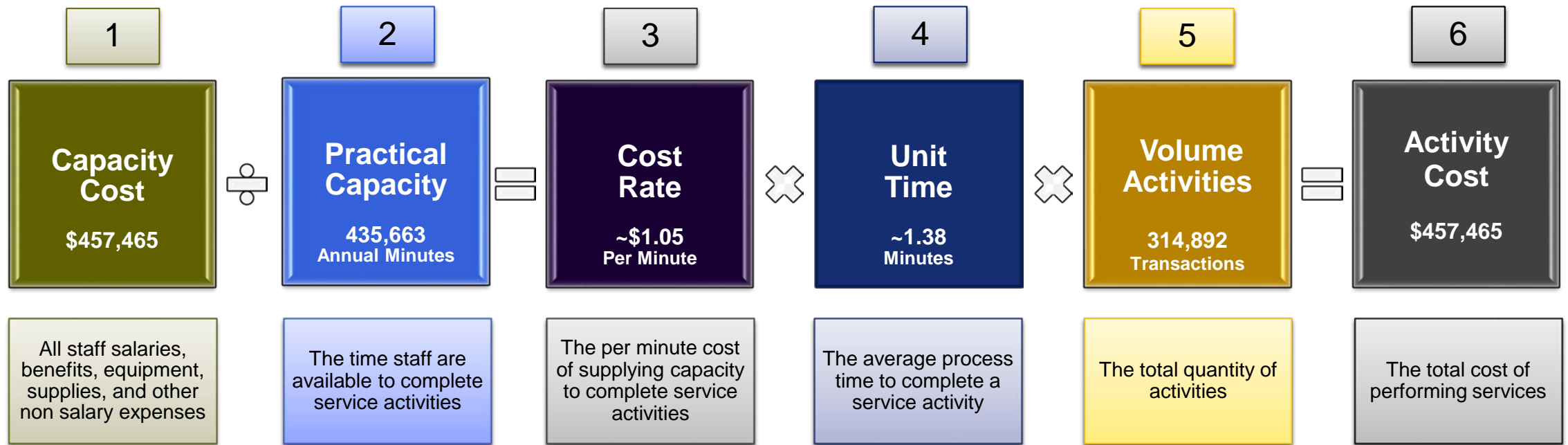
# Time Driven ABC

A Simpler Approach to Costing Activities



# Methodology

## TDABC Formula



Example provided is for illustration purposes only  
 Cost rate has been rounded. Exact calculation = \$1.0500433  
 Unit time has been rounded. Exact calculation = 1.3835315

# Questions



# Practical Capacity

Identify Available Capacity

Capacity Assumptions Per FTE				
	Days	Hours	Minutes	
Time Available	260	2,080	124,800	Total Annual Time Employed
Holidays (Average)	13	104	6,240	Deduct Time - Not Available To Serve
Paid Time Off (Average)	16	128	7,680	Deduct Time - Not Available To Serve
Sick Days (Average)	12	96	5,760	Deduct Time - Not Available To Serve
Training/Meetings	0	0	0	Deduct Time - Not Available To Serve
Huddles/On The Job Training	0	0	0	Don't Deduct Hours - Work Is Performed
<b>Practical Capacity (per FTE):</b>	<b>219</b>	<b>1,752</b>	<b>105,120</b>	

# Cost of Capacity

Calculate The Cost To Supply Capacity

Operating Expense Assumptions					
Budget Category	Total Expense	Total Expense (FTEs)	Practical Capacity (FTEs)	Practical Capacity (105,120 Minutes Per FTE)	Descriptions
Salaries	294,589	5.14	4.14	435,663	All Staff
Benefits	142,876	0.00	0.00	0.00	Health & Welfare
Other OPEX	20,000	0.00	0.00	0.00	Travel, Supplies, Equipment, Printing, IT, & Communications
	<b>457,465</b>	<b>5.14</b>	<b>4.14</b>	<b>435,663</b>	

<b>Total Expense</b>	<b>\$ 457,465</b>	<b>=</b>	<b>\$1.050</b>
<b>Practical Capacity</b>	<b>435,663</b>		<b>Cost Rate Per Minute</b>

Example provided is for illustration purposes only  
 Practical capacity FTE has been rounded. Exact FTE is 4.144435

# Unit or Process Time

Evaluate The Time To Complete Activities

## TIME and ATTENDANCE PROCESS

Activities	Unit of Measurement	Process Time (Minutes)
Step 1. Review & Push Timesheets	Per Timesheet	1
Step 2. Calculate Specialty Pay	Per Timesheet	5
Step 3. Validate Payroll Roster	Per Timesheet	1
Step 4. Complete Check Write Audit	Per Timesheet	2
Step 5. Follow-up Unapproved Time	Per Department	5
Step 6. Maintain Timeclock Assignments	Per Employee	3
Step 7. Maintain Supervisor Assignments	Per Student	2
<b>TOTALS</b>		<b>1.38</b>

# Transactional Volume

Estimate Total Activity Steps

## TIME and ATTENDANCE PROCESS

Activities	Unit of Measurement	Process Time (Minutes)	Total Volume	Total Process Time
Step 1. Review & Push Timesheets	Per Timesheet	1	101,581	101,581
Step 2. Calculate Specialty Pay	Per Timesheet	5	2,340	11,700
Step 3. Validate Payroll Roster	Per Timesheet	1	103,921	103,921
Step 4. Complete Check Write Audit	Per Timesheet	2	103,921	207,842
Step 5. Follow-up Unapproved Time	Per Department	5	1,347	6,735
Step 6. Maintain Timeclock Assignments	Per Employee	3	320	960
Step 7. Maintain Supervisor Assignments	Per Student	2	1,462	2,924
<b>TOTALS</b>		<b>1.38</b>	<b>314,892</b>	<b>435,663</b>



# Total Activity Cost

Determine Cost & Demand On Capacity

## TIME and ATTENDANCE PROCESS

Activities	Unit of Measurement	Process Time (Minutes)	Total Volume	Total Process Time	Cost Rate Per Minute	Total Activity Cost	Capacity Used (FTE)	
Step 1. Review & Push Timesheets	Per Timesheet	1	101,581	101,581	\$ 1.050	\$ 106,664	0.97	
Step 2. Calculate Specialty Pay	Per Timesheet	5	2,340	11,700	\$ 1.050	\$ 12,285	0.11	
Step 3. Validate Payroll Roster	Per Timesheet	1	103,921	103,921	\$ 1.050	\$ 109,121	0.99	
Step 4. Complete Check Write Audit	Per Timesheet	2	103,921	207,842	\$ 1.050	\$ 218,243	1.98	
Step 5. Follow-up Unapproved Time	Per Department	5	1,347	6,735	\$ 1.050	\$ 7,072	0.06	
Step 6. Maintain Timeclock Assignments	Per Employee	3	320	960	\$ 1.050	\$ 1,008	0.01	
Step 7. Maintain Supervisor Assignments	Per Student	2	1,462	2,924	\$ 1.050	\$ 3,070	0.03	
<b>Totals</b>		<b>1.38</b>	<b>314,892</b>	<b>435,663</b>	<b>\$ 1.050</b>	<b>\$ 457,465</b>	<b>4.14</b>	
							<b>4.14</b>	<b>Total Capacity Used</b>
							<b>4.14</b>	<b>Total Capacity Supplied</b>
							<b>0.00</b>	<b>Total Capacity Available</b>

# At A Glance

R'Shared Services 2010 - 2017

Transformation  
2015 - 2017

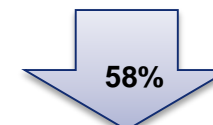
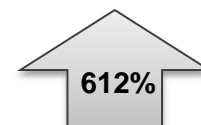
~125,000  
Service Requests

99.5%  
First Run Quality

~4,270  
Clients

11 FTE

1.17M  
Expense



Implementation  
2010 - 2014

~20,000  
Service Requests

64%  
First Run Quality

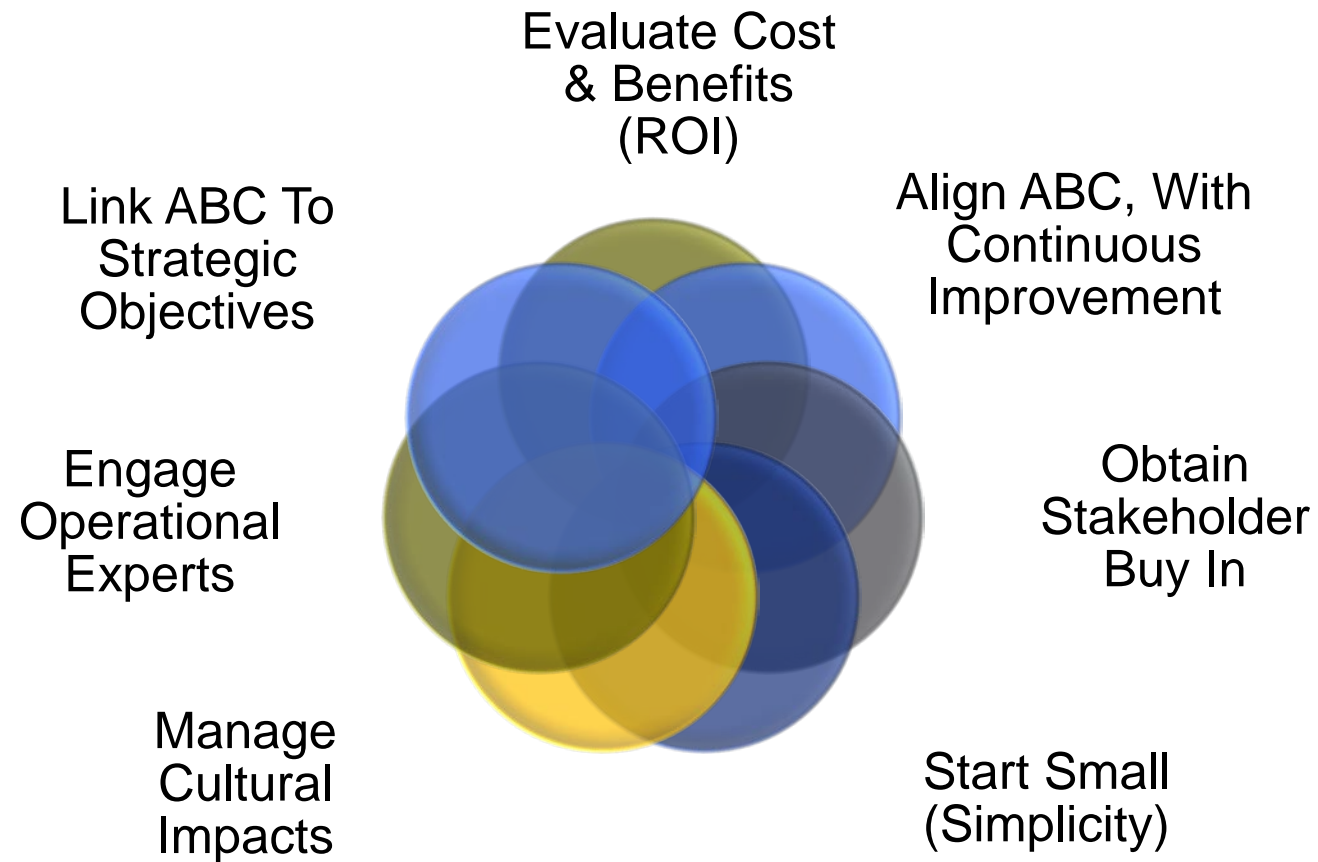
~600  
Clients

26 FTE

2.9M  
Expense

# Reflections

Observations and Lessons Learned



# Questions

