

# Breaking Down Silos Between Procurement and Facility Management Using Performance Measurements

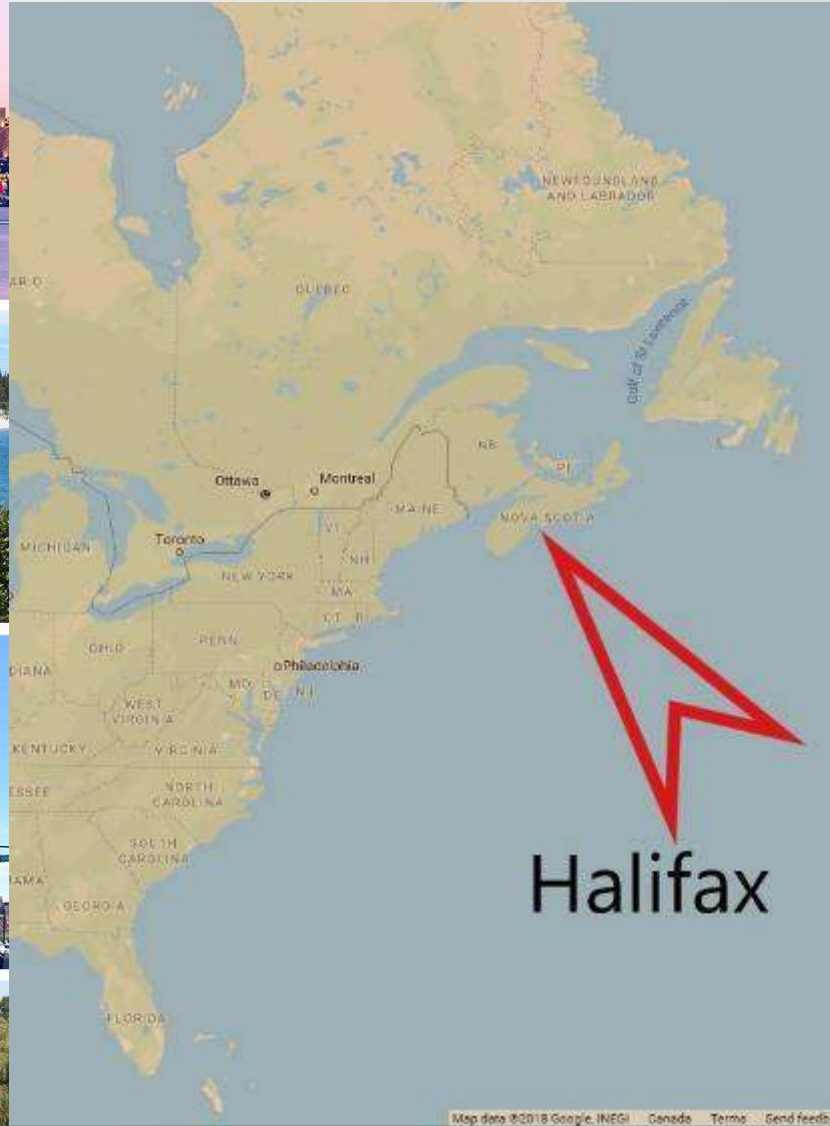


Ian Wagschal  
Director of Facilities Management



UNIVERSITY OF  
**KING'S**  
COLLEGE • HALIFAX

# Halifax, Nova Scotia



Halifax

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# Dalhousie University

- 18,200 Students
- 1,000 Faculty
- 2,100 Staff



- Annual Operating Budget \$400M
- Ranked 12<sup>th</sup> in Canada, 283<sup>rd</sup> in World

# Dalhousie Facilities Management

- 5.8M square feet in 165 Buildings
- \$65M Annual Budget
- Facilities Condition Index of 22% (Poor)
  - ~\$360M in deferred maintenance
- 550 Facilities Management Employees
  - 50% Custodians
  - 35% Trades
  - 15% Admin / Management

# Dalhousie Procurement

- >\$100M across about 200 tenders annually
- Staff of 14
- 60% Facilities Management

# Dalhousie Legal Counsel

- Internal Legal Team of about 5 Barristers
- External support from local law firms



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# Webinar Outcomes

1. Understand how to find a common purpose in times of struggle to create **stronger relationships** between institutional departments.
2. Understand **Expert Driven Project Delivery** (XPD)
3. Understand the role of **risk** in generating **enterprise metrics**.



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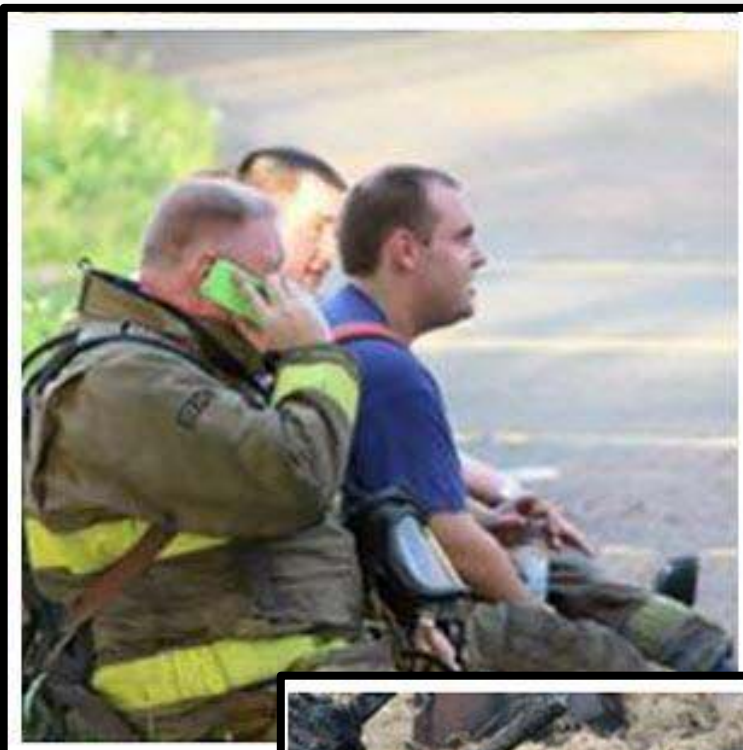
# Facilities Procurement Legal



# Silos and Conflict



ROBB SCOTT / Twitter



# Common Interest

+




= Change

# Normal Strategic Planning and Execution



**Department A**  
Business Plan 2015-2016




**Core Objectives**  
FY 2016-17

Safety	Productivity	Quality	FM Values
Zero Safety Incidents	Facilities Renewal: \$85.7M	Client Satisfaction: Measure Satisfaction for each FM.	Commitment
50 Third Party Site Safety Audits	Client Funded: \$8 \$13.2M	Risk Management: Risk plans completed monthly on all projects.	Dedication
130 Site Safety Observations		Cost Management: Change Orders + Unearned Funding = 10%.	Integrity
			Leadership
			Quality
			Teamwork

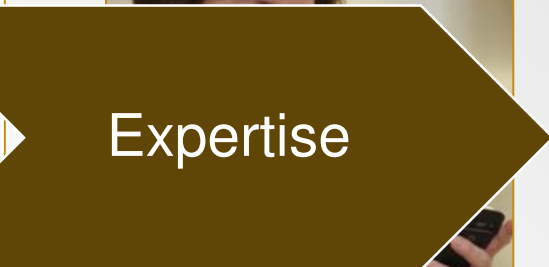
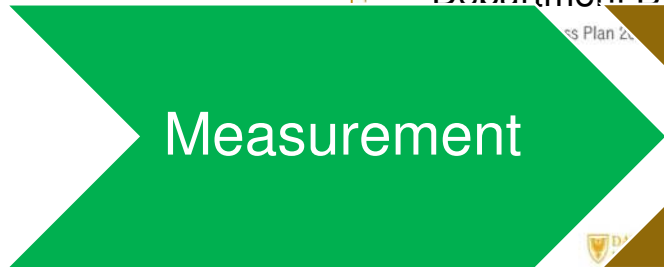


**Department B**  
Business Plan 2015-2016




**Core Objectives**  
FY 2016-17

Safety	Productivity	Quality	FM Values
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**Department C**  
Business Plan 2015-2016



**Core Objectives**  
FY 2016-17

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# When project risk looks like this:

Everyone can stay comfortable in their silos.  
Everyone feels like they are in control.



# Sooner or later your risk on a project looks like this...



# What we learned (the hard way)



We are a part of the problem.

We wanted to change.

# Best Value Procurement or XPD - Expert Driven Project Delivery



XPD is a Management Tool

- Tool which increases opportunity to partner with **experts**
- Enables experts to take control and accountability
- Allows **experts** to maximize efficiency
- Increase efficiency results in higher performance
  - Projects finished ahead of schedule
  - Projects finished without cost increases
  - Projects finished with higher customer satisfaction



# Experts:



- Experts see their work as valuable, and are not attracted to cutting corners or poor end-products.
- Experts own their work, and will seek arrangements that provide them the freedom to succeed.
- Experts know their work, manage risk well, and despise being micro-managed.

# Procurement

- Award to **lowest compliant bidder**.
  - Assumption: Vendor will do exactly what we tell them to do, at the lowest cost.
  - Outcome: Vendor is rewarded for cutting corners and profits on our errors.
  - Experts see their work as valuable, and are not attracted to cutting corners or poor end-products.

# Legal

- Contract **written by ourselves.**
  - Assumption: Contract will give us control over the vendor's activities.
  - Outcome: Vendor sees the contract as one-sided and possibly hostile. They are disempowered, and do not take ownership of the work. When risks materialize, this setup discourages collaboration.
  - Experts own their work, and will seek arrangements that provide them the freedom to succeed.

# Project Management

- Project Manager **directs the work.**
  - Assumption: The Project Manager must control the vendor at all times.
  - Outcome: The Project Manager must micro-manage to be successful, and thereby assumes more risk.
  - Experts know their work, manage risk well, and despise being micro-managed.

# Experts:



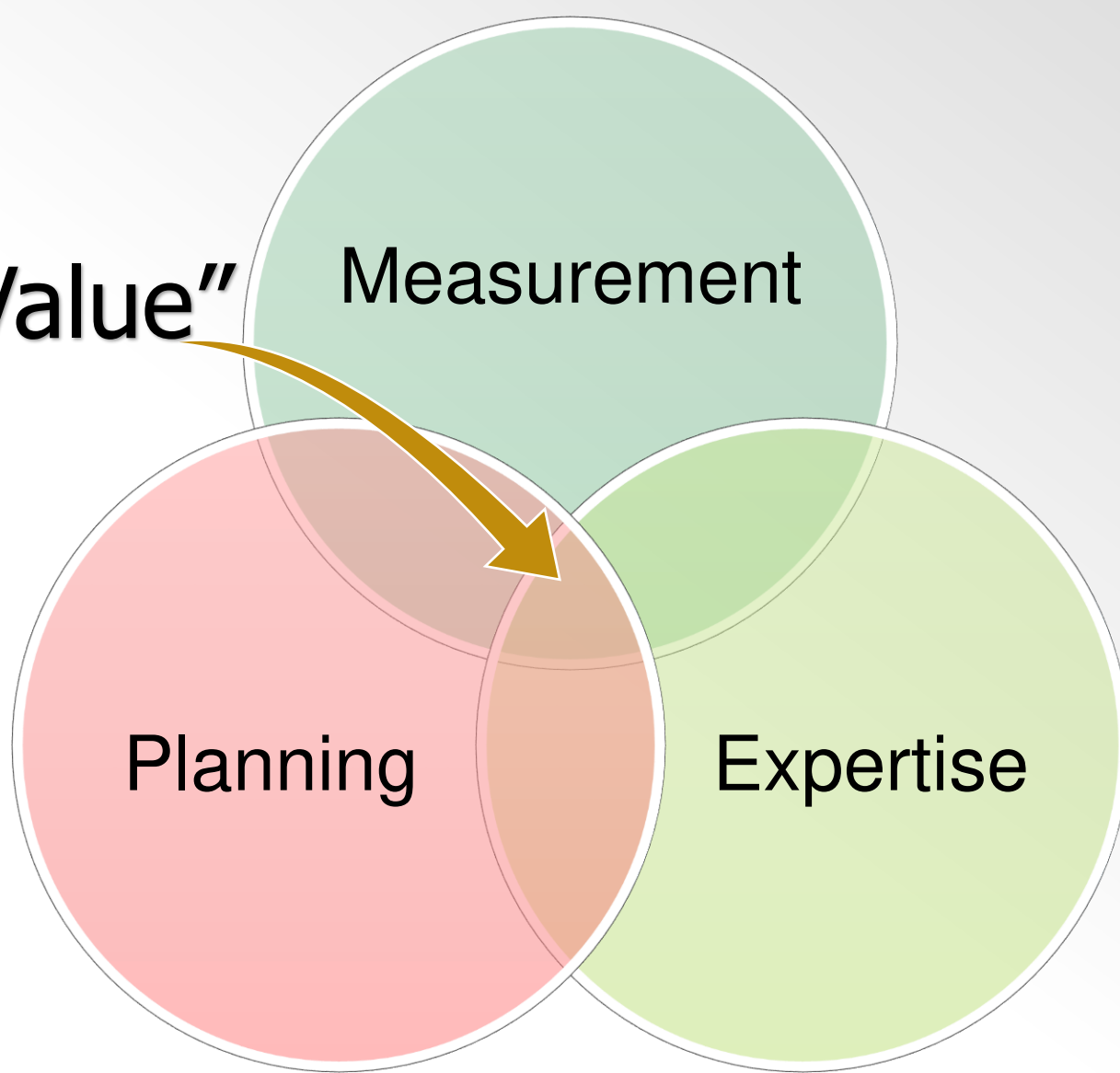
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- Experts own their work, and will seek arrangements that provide them the freedom to succeed.
- Experts know their work, manage risk well, and despise being micro-managed.

# Results Before Expert Based Project Delivery:

## Kitchen Project

- Change order rate of 14%+
- Although functionally complete in time for September, substantially completion certificate was issued in December.
- Three separate liens were contemplated (none perfected).
- Hidden financial and human cost of time lost. Losses accumulate against this project, and also against other concurrent and future projects.

**“Best Value”**

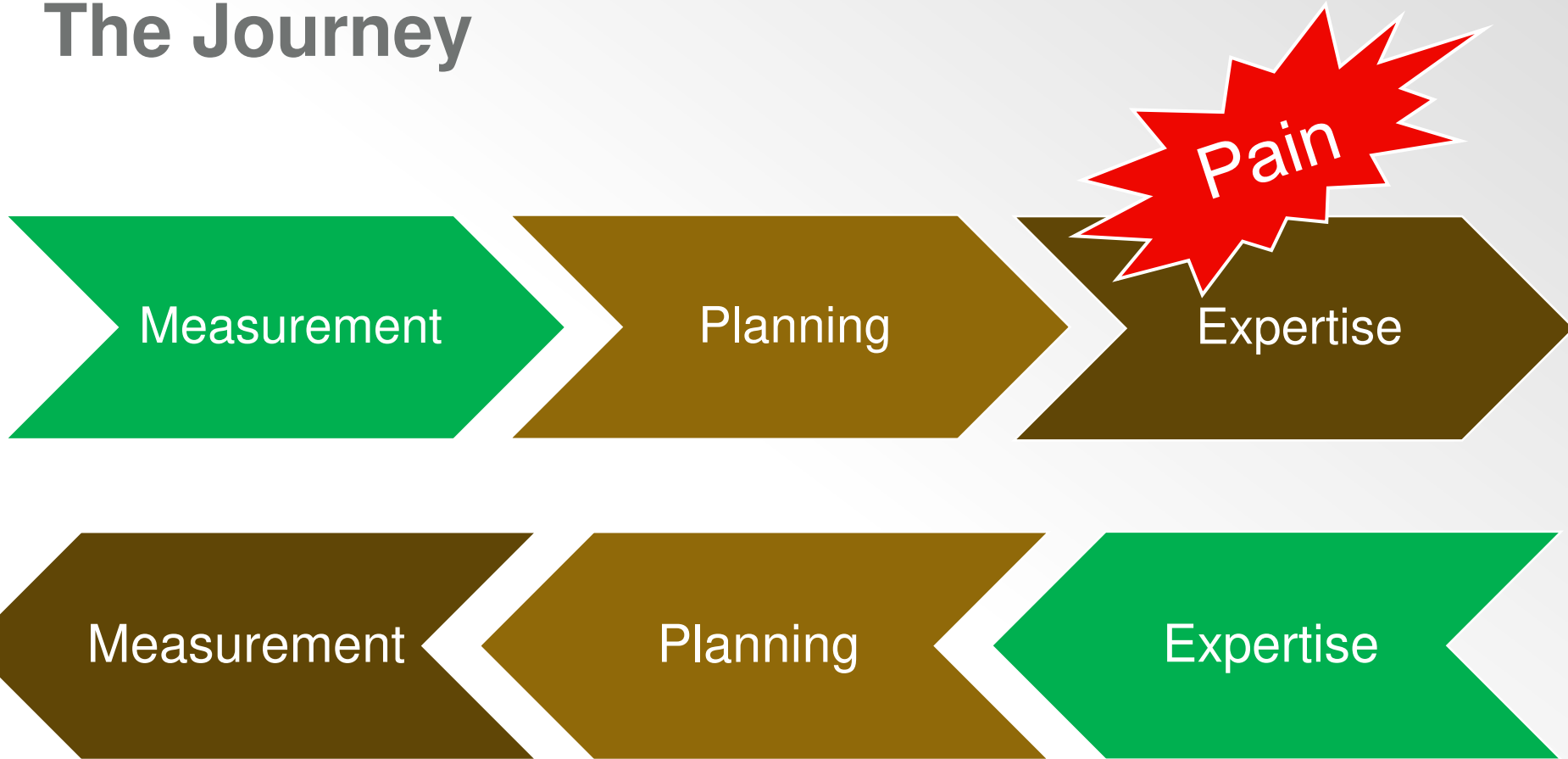


**Measurement**

**Planning**

**Expertise**

# The Journey





# Best Value Procurement or XPD - Expert Driven Project Delivery



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# Outcomes from XPD

- 13 Minor Projects (\$17.6M)
  - 3.22% change order rate (gross dollars)
  - Significant on-schedule (or earlier) completion
    - (still working to make the metric reliable)
- 4 Major Capital Projects (\$22M)
  - 4.16% change order rate (gross dollars)
  - 1.62% change order rate (per project)

# XPD in one sentence

Experts manage risk.

Measurement

Planning

Expertise



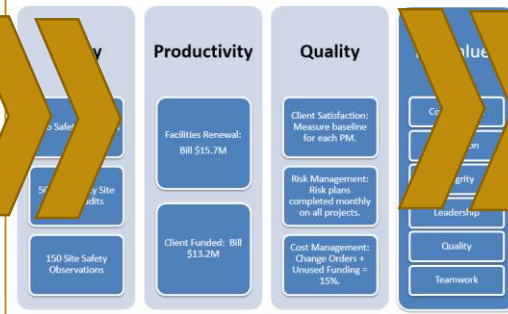
## Facilities Management

Business Plan 2015-2016



## Core Objectives

FY 2016-17



Measurement

Planning

Expertise

A	B	C	D	E	F	G	H	I	J
#	DATE ENTERED	SOURCE OF THE RISK / INNOVATION	RISK / INNOVATION BRIEF NARRATIVE DESCRIPTION <small>(Note: Press "ALT+ENTER" to Create a New Line within a Cell)</small>	ACTUAL DATE RESOLVED	SCHEDULE IMPACT	COST IMPACT	Satisfaction with Contractor's Risk Response	INSTITUTIONAL RISK SEVERITY	LESSONS LEARNED
0	1-15-09	Please identify the responsible party & category for the risk (from the drop down menu)	Please describe the details of the risk: 1. What is the risk / brief description of the background? 2. What will be done / what is the action plan to minimize this risk? 3. Who is responsible for specific actions? What actions are most pressing and when are they needed? 4. Brief narrative of the risk impact (potential or actual impacts to cost, schedule, quality)? 5. Any on-going, week-to-week updates to this risk (if applicable)	2-1-09	15	\$10,000	1-10 Scale	10 = Major Institutional Impact 5 = Moderate Institutional Impact 1 = Project Level Impact Only	Please describe the details of Lesson Learned: What could be done to avoid or encourage this impact in the future? Be specific.
1	7-27-15	CLIENT: Non-Scope Change	1. Insufficient communication to stakeholders causes delays / rework. 2. Risk Report updated weekly and sent to Stakeholders. 3. Contractor will provide risk updates. Dal PM will update and send Risk Report. 4. Ongoing potential impact on stakeholder satisfaction and schedule.					5	
2	7-27-15	CONTRACTOR: Error / Omission / General Issues	1. Contaminated soil (pyritic slate) is discovered causing delays and additional costs. 2. Hazmat testing to be performed. Disposal / relocation plans to be provided prior to startup. Disposal contingency built into budget. 3. Dal PM to arrange testing. Contractor to provide disposal plan 4. Impact on cost and schedule. 5. Testing shows contamination (not pyritic). Contractor has confirmed original disposal location is acceptable at no additional cost.	9-21-15	1	\$ -	10	1	1. Always test for contaminants as early as possible (design), as the impact to cost and schedule could have sidelined the project. 2. Fast and best resolution requires bringing all the experts together (contractor and consultant).
			1. Weather interruptions cause delays.						

# Risk Planning Tool

**Institutional Severity**

**Client Satisfaction**

**Lessons Learned**

**Dates : Entered and Resolved**

**Source of Risk**

**Risk Narrative**

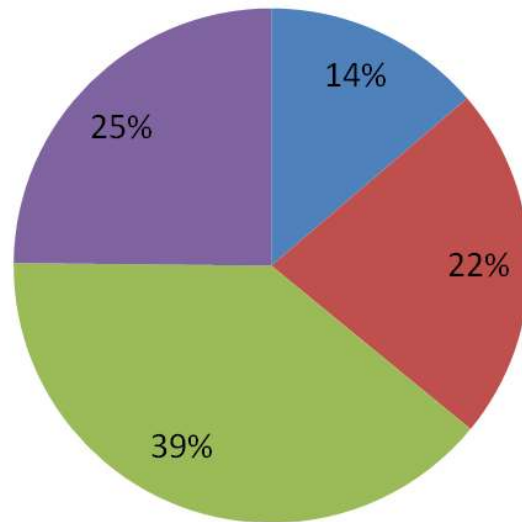
**Impact: Schedule and Budget**

**Risk Planning Tool**

Measurement

Planning

Expertise



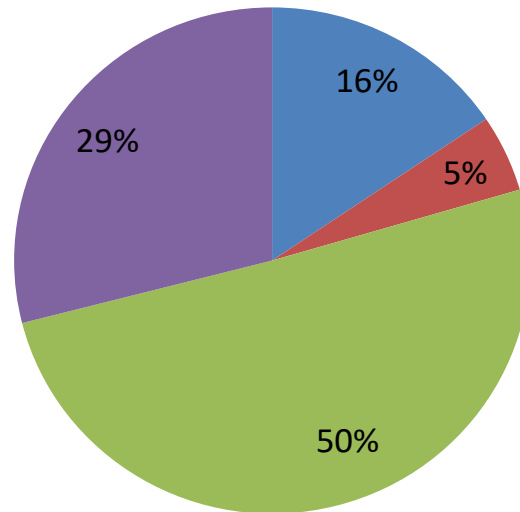
- CLIENT
- CONTRACTOR
- DESIGNER
- UNFORESEEN

What source of risk most impacts project  
**COST?**

Measurement

Planning

Expertise



- CLIENT
- CONTRACTOR
- DESIGNER
- UNFORESEEN

What source of risk most impacts project SCHEDULE?



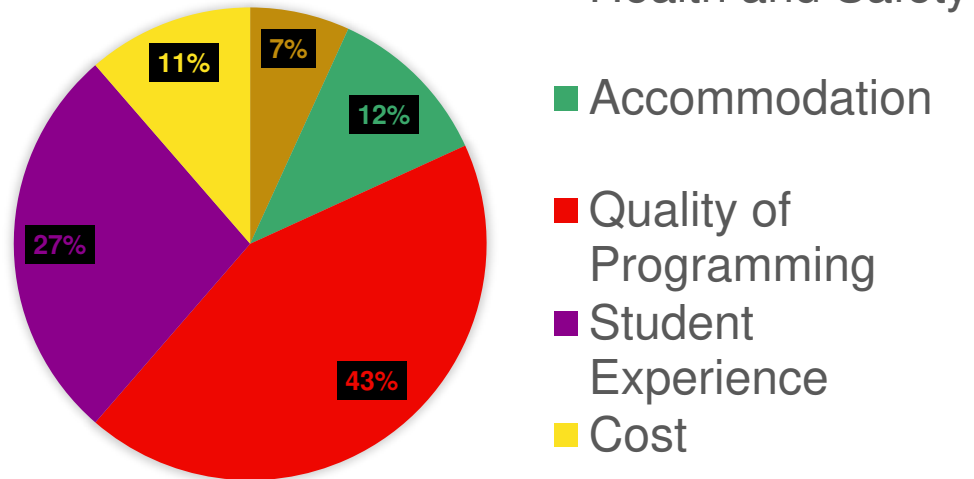
Measurement

Planning

Expertise

# Student Retention

IMPACT BY SOURCE OF RISK



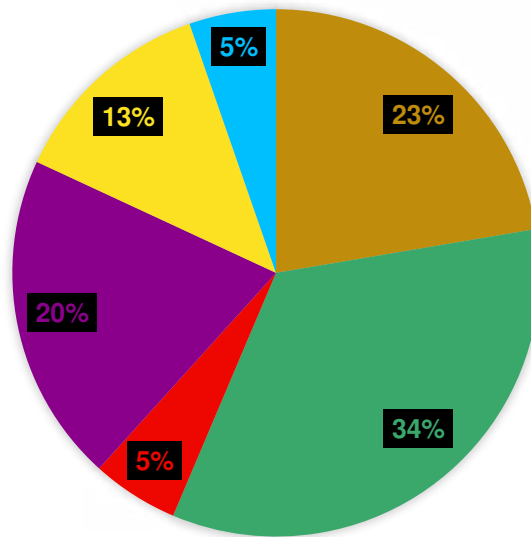
Measurement

Planning

Expertise

# Annual Budgeting

## IMPACT BY SOURCE OF RISK



■ Enrollment

■ Utilities

■ Government Funding

■ External Donations

■ Returns on Investments

■ Labour Costs

1. Understand how to find a common purpose in times of struggle to create **stronger relationships** between institutional departments.
- **PROCUREMENT Experts:** Use logical deduction to remove the risk of bias.
  - **LEGAL Experts:** Use mutually beneficial agreements to create collaborative relationships.
  - **PROJECT MANAGEMENT Experts:** Organize other experts so they can mitigate risk and create value.

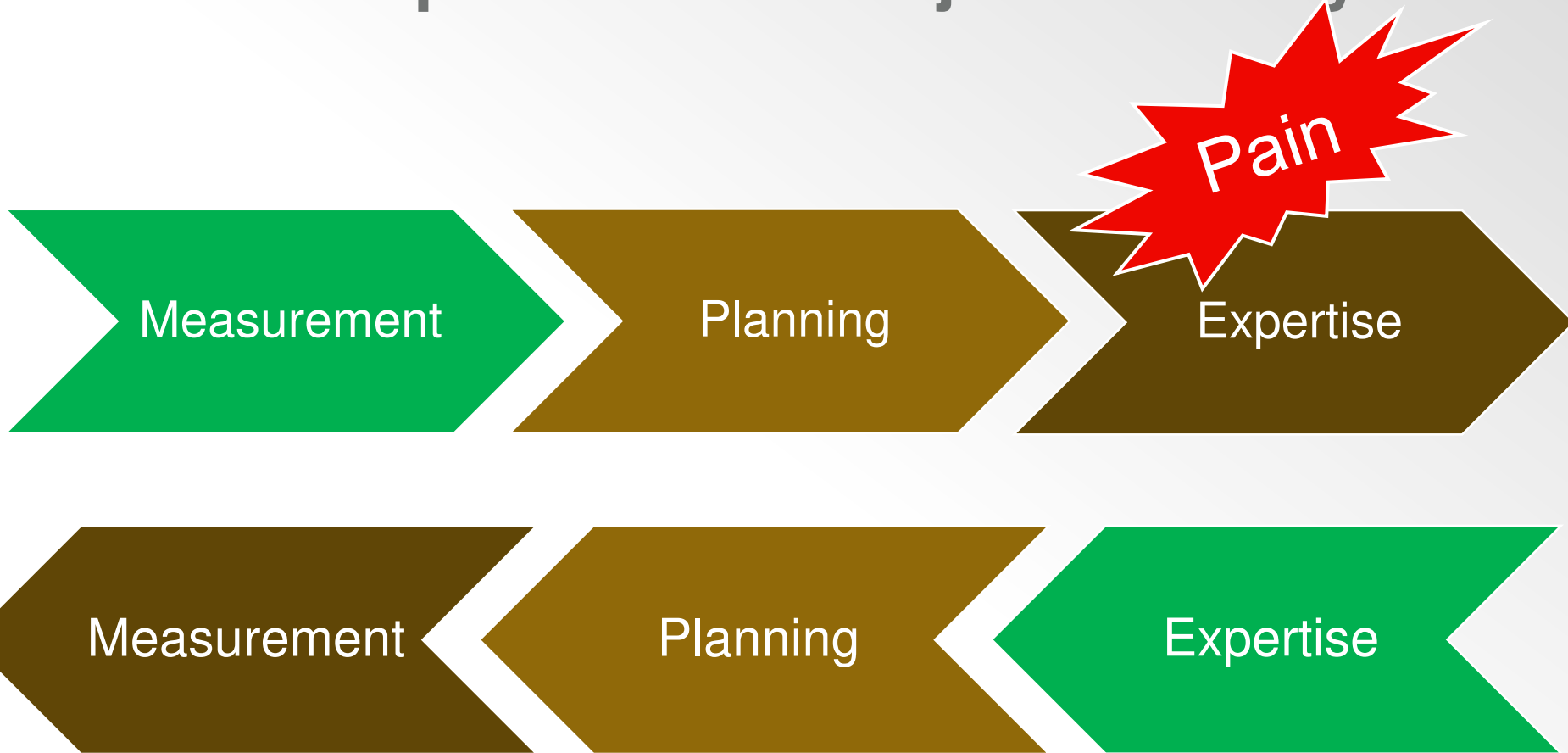
Common Interest

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= Change

# XPD – Expert Driven Project Delivery



## 2. Understand **Expert Driven Project Delivery** (XPD)

Measurement

Planning

Expertise



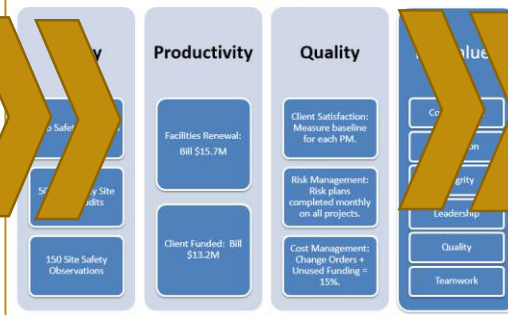
### Facilities Management

Business Plan 2015-2016



### Core Objectives

FY 2016-17



3. Understand the role of **risk** in generating **enterprise metrics**.

# Webinar Outcomes

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