

PUBLIC PRIVATE GROWTH INITIATIVE

**ENGINEERING AND
CONSTRUCTION SECTOR**

PROVIDING THE FOUNDATION OF ECONOMIC GROWTH

“Economic U-Turn: Transforming South Africa into a Construction Site”

13 November 2019

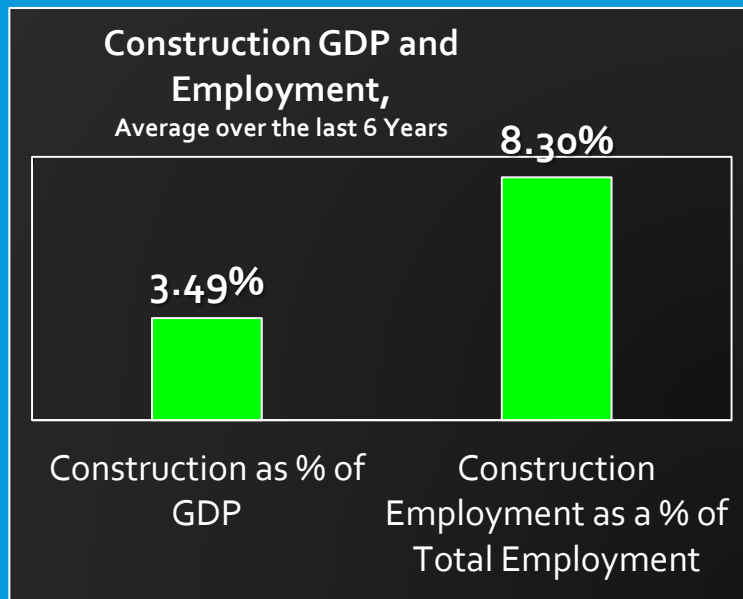
Introduction: Infrastructure and Inequality

There is **robust evidence** that the provision of **good quality infrastructure** can be a powerful tool for **poverty reduction**, has a positive effect on the long run **growth** and a negative effect on **income inequality**. Calderón and Servén (2008)

NATIONAL E&C SECTOR: *GROWTH AND EMPLOYMENT*

1. The sector is ideally suited to assist in driving South Africa out of this low growth stagnation in alignment with the NDP.
2. Concurrently supporting further accelerated growth and immediately reducing youth and unskilled unemployment
3. Through the multiplier effect downstream industry and manufacturing growth and employment initiated.

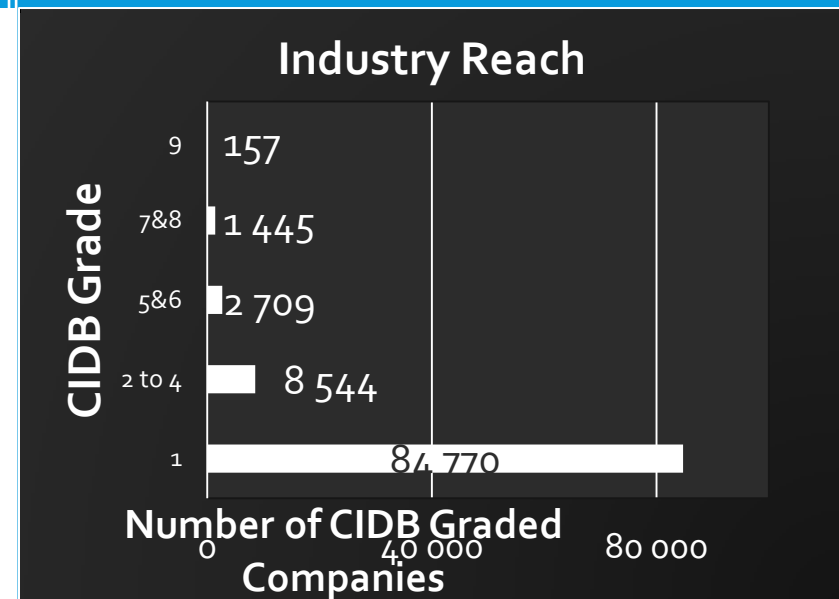
In a **high unemployment** economy the Construction Industry is a **disproportionate employer** of citizens



In a **low skill** resourced economy the Construction Industry is able to **employ** a disproportionate amount of **unskilled citizens**

Occupational Major Group	% of Total
Managers	9%
Professionals	8%
Technicians and Associate Professionals	11%
Clerical Support Workers	6%
Service and Sales Workers	2%
Trade Workers	14%
Plant and Machine Operators and Assemblers	13%
Elementary Occupations	37%

It is a **deep and broad based industry** catering for **thousands of businesses** of all sizes and **geographical locations**.



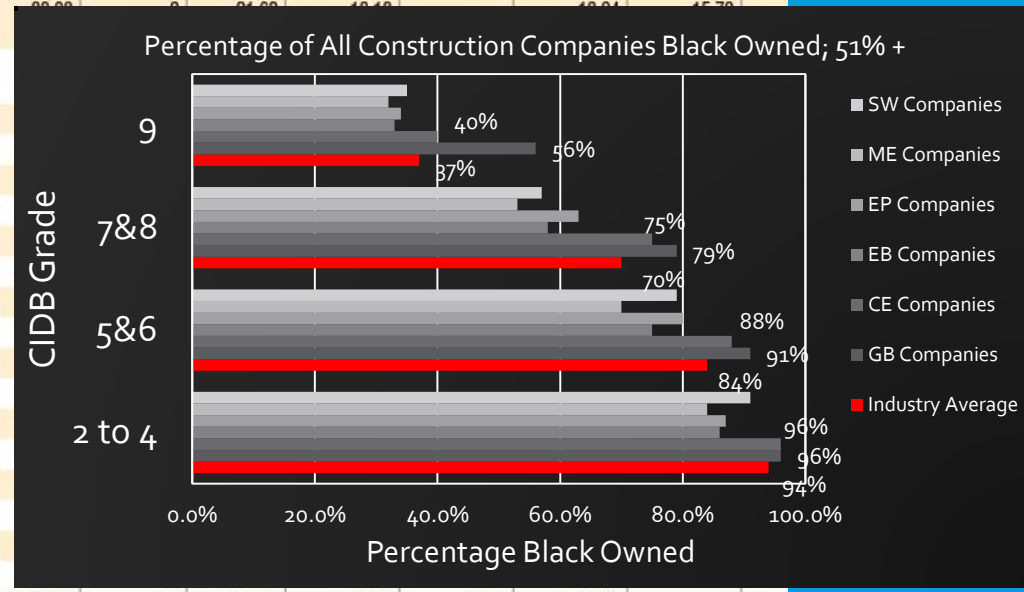
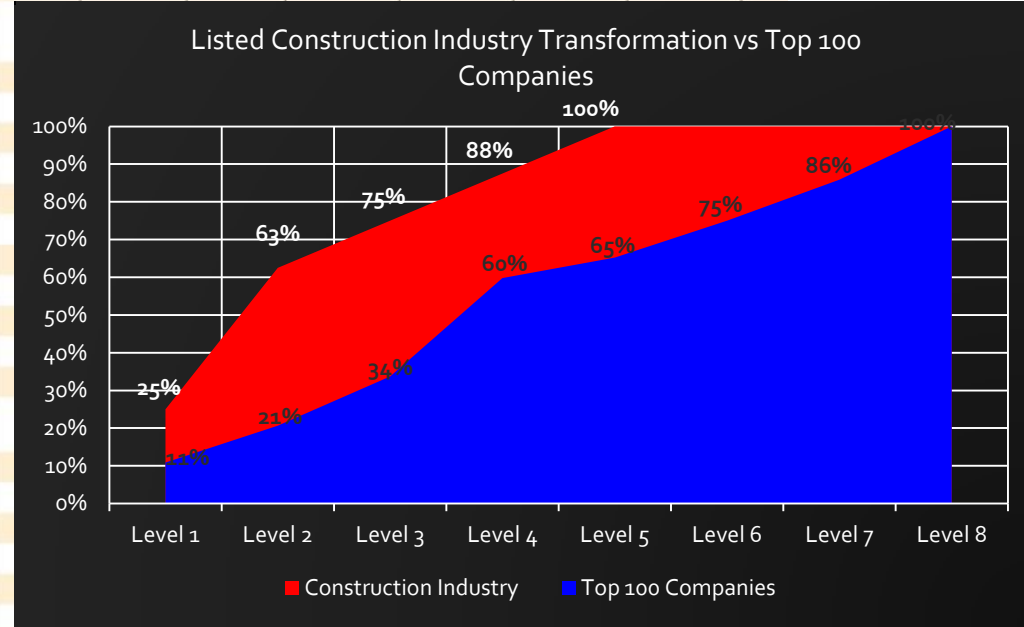
TRANSFORMED

Top Empowerment Companies for 2018



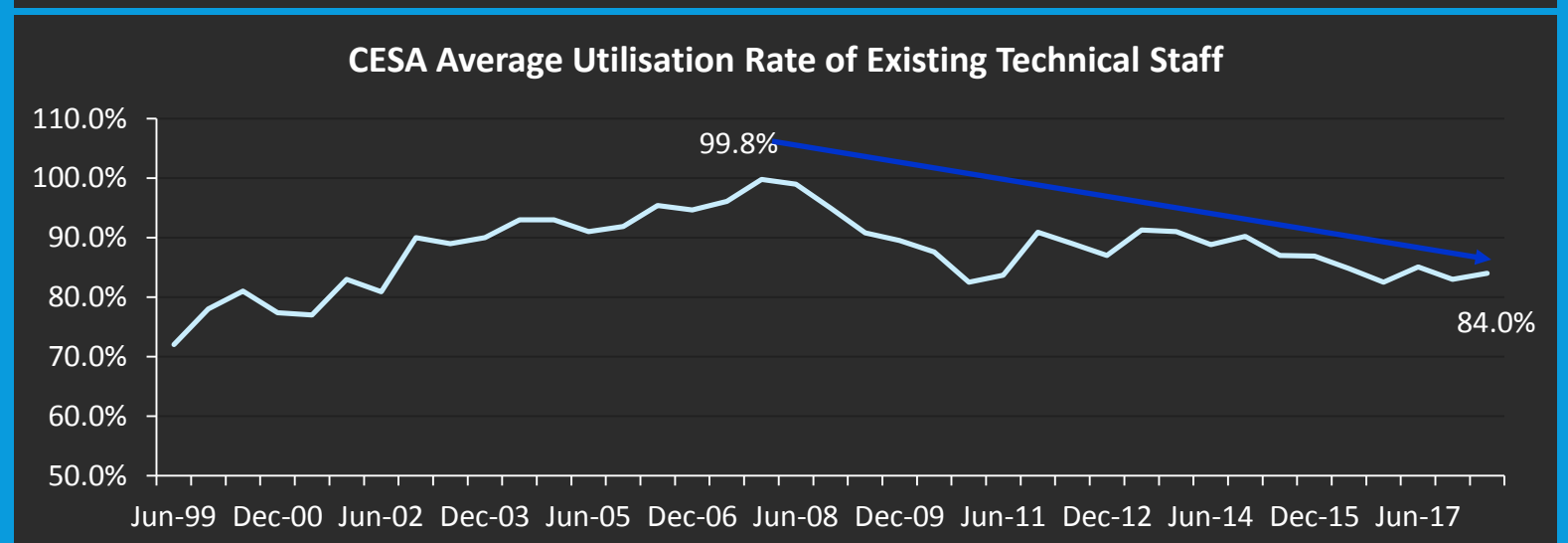
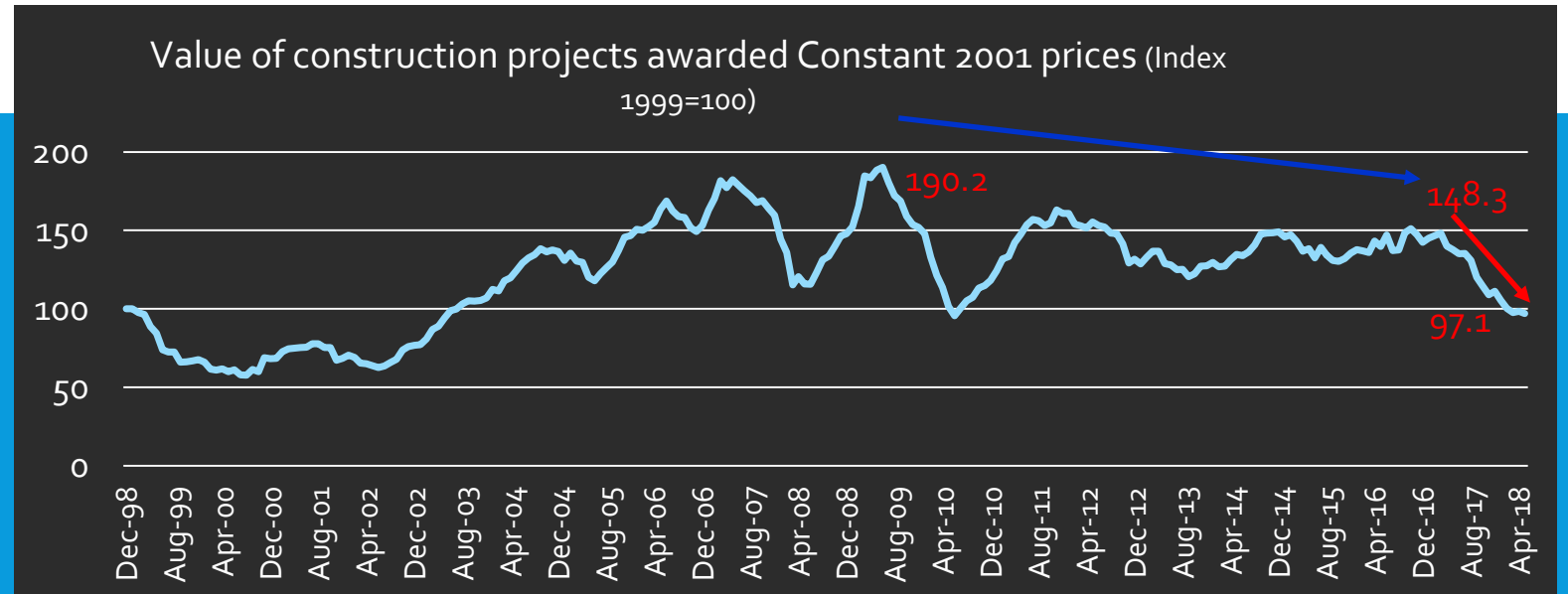
All the listed Construction entities in the top 60 of Top 100 companies in RSA

Amended Codes - Overall												
Rank 2018	Entity Name	Sector Code	Total BEE Score	Rebased Score* (%)	Recognition Level	Ownership score	Management Control	Employment Equity	Skills Development	Preferential Procurement	Enterprise Development	Ent and S Devel
1	Raubex Group Ltd	Construction	106.10	101.05	1	26.07	12.97		24.76			
2	Wilson Bayly Holmes-Ovcon Ltd and Subsidiaries	Construction	104.11									
3	Ansys Ltd	ICT	128.44									
4	Tsogo Sun Holdings Ltd	Tourism	106.67									
5	Standard Bank Group Ltd	Financial	113.68									
6	Sun International Ltd	Tourism	104.02									
7	Mustek Ltd	ICT	120.77									
8	EOH Holdings Ltd	ICT	120.58									
9	Investec Ltd	Financial	99.57									
10	Sea Harvest Group Ltd	Generic	100.37									
11	Super Group Holdings (Pty) Ltd	Generic	100.12									
12	Calgro M3 Holdings Ltd	Property	103.74									
13	Nedbank Ltd	Financial	109.97									
14	Hosken Consolidated Investments Ltd	Generic	98.10									
15	Sanlam Ltd	Financial	107.44									
16	Anchor Industries (Pty) Ltd	Generic	97.32									
17	Liberty Group Ltd	Financial	107.13									
18	Aveng Africa (Pty) Ltd	Generic	97.16									
19	Oceana Group Ltd	Generic	96.77									
20	Santam Ltd	Financial	101.62									
21	Old Mutual Life Assurance Company (South Africa) Ltd	Financial	105.70									
22	Barclays Africa Group Ltd (Previously ABSA Group Ltd)	Financial	105.52									
23	Group Five Ltd	Construction	95.10									
24	Adapt IT (Pty) Ltd	ICT	113.21									
25	Adapt IT (Pty) Ltd	ICT	110.90									
26	Naspers Ltd	ICT	110.78									
27	Barloworld Ltd	Generic	100.81									
28	Barloworld Ltd	Generic	91.39									
29	Alexander Forbes Group Holdings Ltd	Financial	96.42									
30	African Oxygen Ltd	Generic	91.02									
31	Esor Ltd	Generic	90.95									
32	Adcock Ingram Holdings	Generic	90.57									
33	Omnia Group (Pty) Ltd	Generic	90.32									
34	PPC Ltd	Generic	90.18									
35	AECI Ltd	Generic	90.17									
36	Sappi Southern Africa Ltd	Forestry	91.67									
37	Allied Electronics Corporation Ltd	ICT	108.54									
38	Vodacom Group Ltd	ICT	108.04									
39	South African Distillers and Wines	Generic	89.64	82.24	4	22.26	6.84		22.82			



SECTOR TRENDS : SECTOR IN DOLDRUMS

- Overall construction sector in doldrums (*especially civils*)
- Higher end of the sector feeling the most pain
- Construction Company failures as a result
- Engineering Companies downsizing
- Retrenchments and job losses at present
- We are in crisis but can recover if investment recovers



WHAT IS THE PROBLEM?



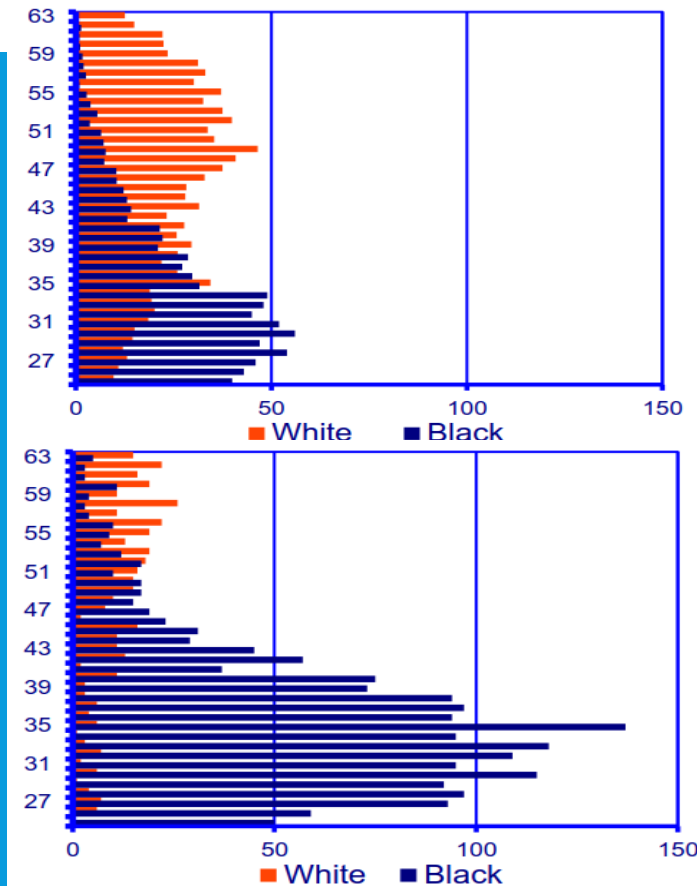
**DEMAND SIDE
DELIVERY SIDE
ENGAGEMENT SIDE**

SECTOR INHIBITORS: LOSS OF STATE TECHNICAL CAPACITY AND EXPERIENCE

Loss of State Technical Capacity and Experience

- Throughout all tiers of government, E&C work has been outsourced over the years, and internal technical structures have been reduced. Coupled with this, the need to transform has resulted in older experienced engineers being replaced by inexperienced technicians and technologists
- With no **technical work taking place in house** and no senior E&C personnel to coach and mentor, youngsters do not gain the appropriate experience and guidance to develop the expertise required to become the technical leaders of tomorrow

Number of Municipalities with	2005	2015
No civil engineering staff	82	28
No civil engineers	126	202
One civil engineering staff member	60	41
Only civil engineering technicians	95	81
Female civil engineering staff	56	153
Registered civil engineering staff	85	56

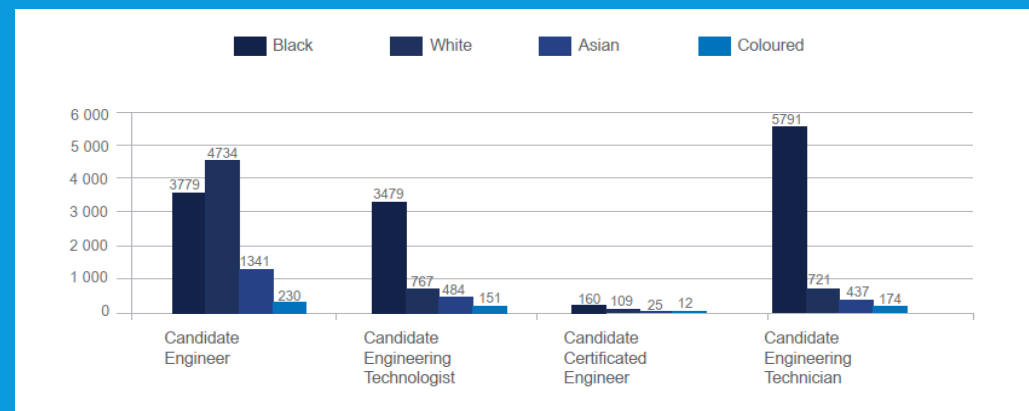
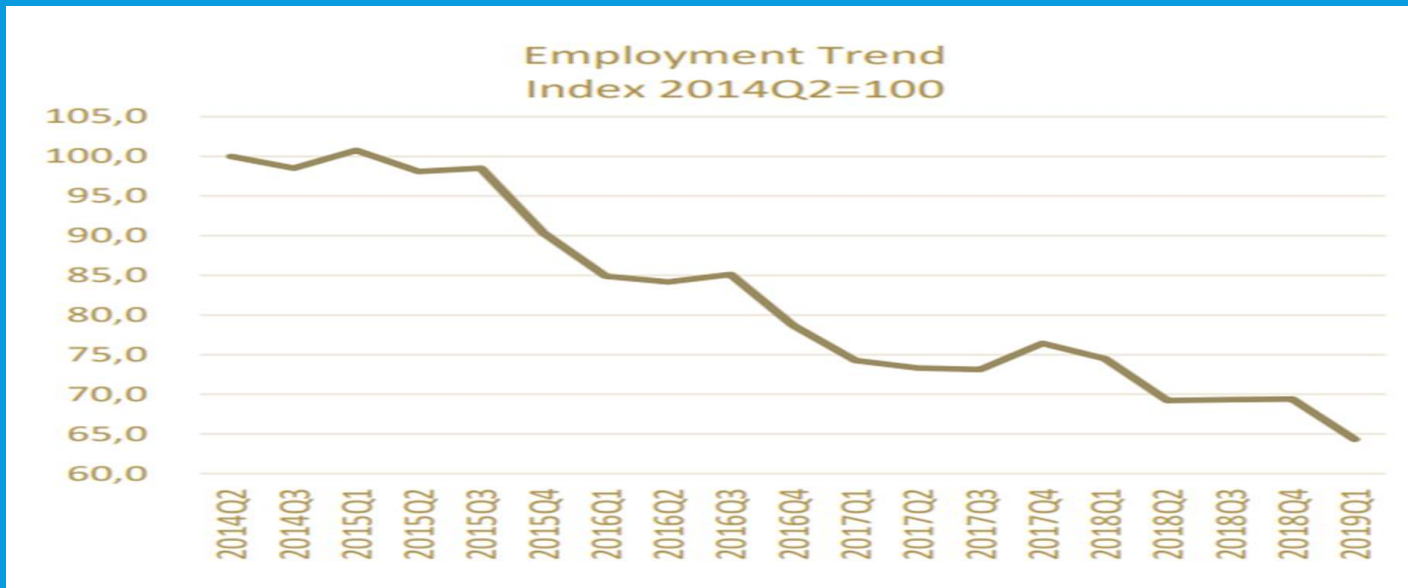
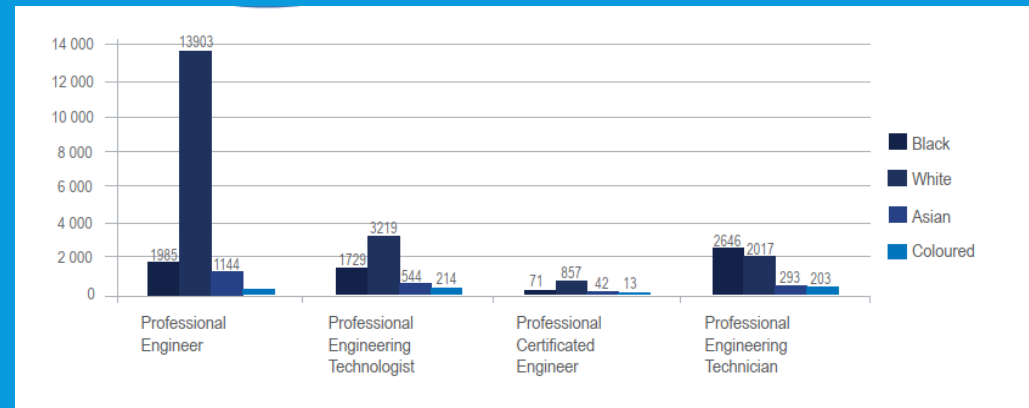
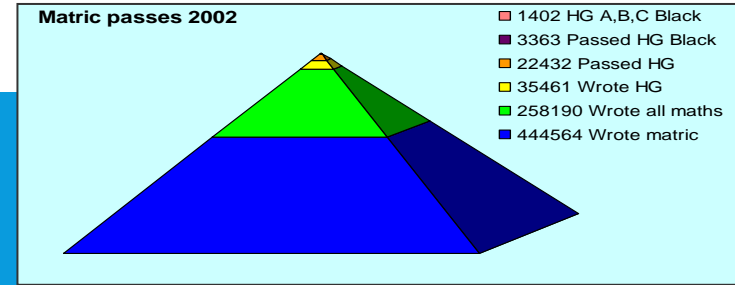


Age and Demographic Change at Local Government

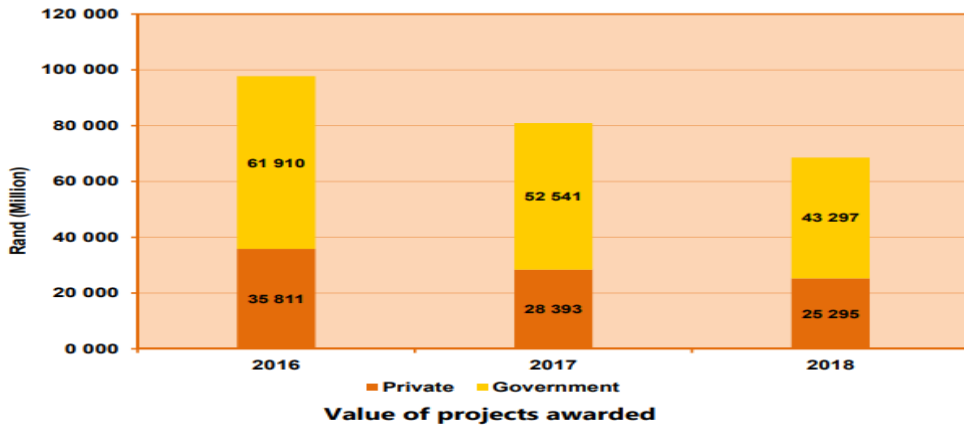
SOURCE: NUMBERS AND NEEDS IN LOCAL GOVERNMENT
 - UPDATE 2015 ALLYSON LAWLESS

SECTOR INHIBITORS: LOSS OF EXISTING SKILLS AND ENFORCED EMPLOYMENT EQUITY

- **Low demand** for C&E services results in low to no local opportunities especially when retrenched.
- Global demand for **experienced** C&E skills evident
- Low demand, coupled with crime makes the allure of leaving RSA large for all races and all levels of experience.
- Enforced employment equity in the sector is disincentivising those with skills to work in government or stay and contribute in South Africa.
- The **education** system has **not produced** the **required graduates** with the desired demographics to **implement employment equity** at the levels desired. As per the chart shown below, **0.3%** of black matriculants passed with higher grade mathematics a subject critical to our sector (and many others).



SECTOR INHIBITORS: EXPENDITURE DROP AND LATE PAYMENTS



An analysis of municipal and provincial capital expenditure for South Africa is given below¹⁴, in which the variance against phased linear capital budget is shown for provincial departments and municipalities.

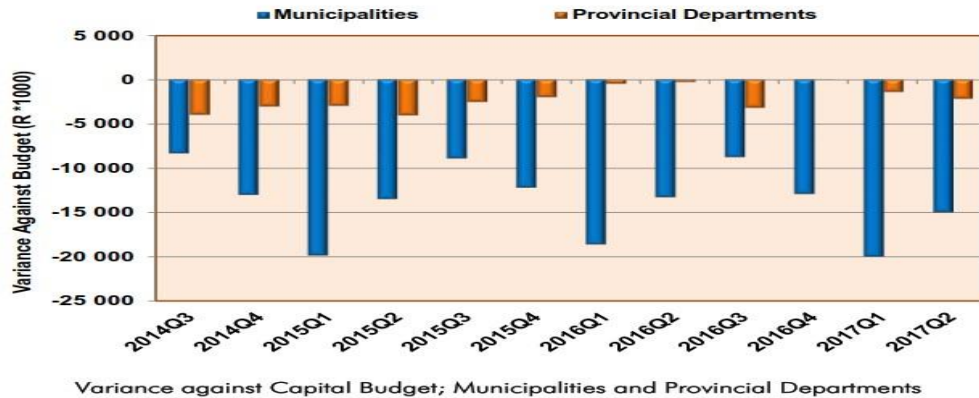
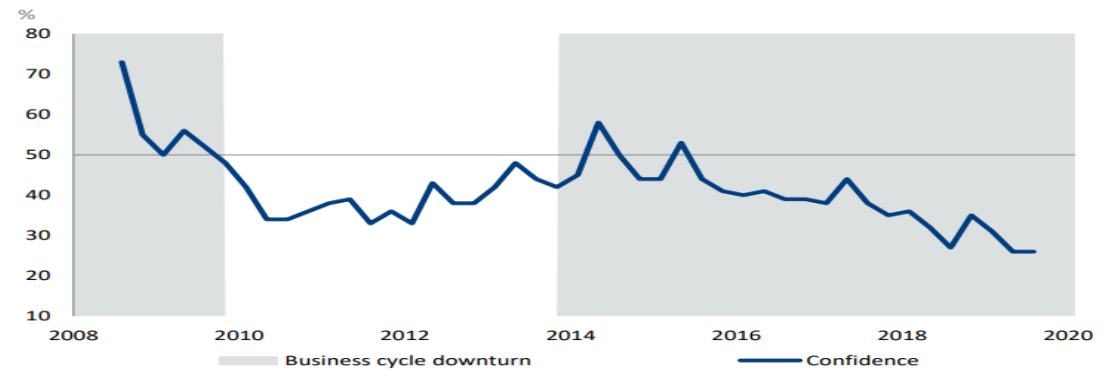
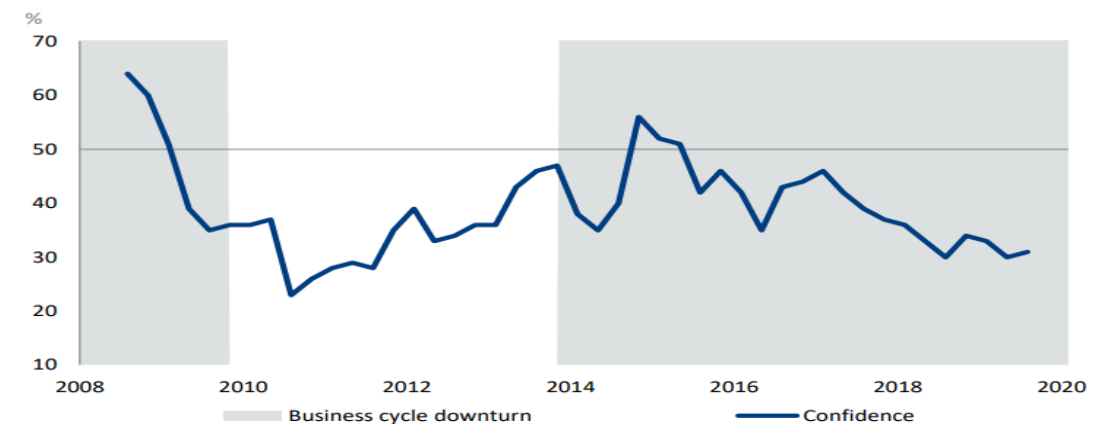


Figure 4: Total civil confidence



Source: BER

Figure 1: General Building business confidence



Source: BER

SECTOR INHIBITORS: FAIR, LEGAL, HONEST, COMPETITIVE AND EFFECTIVE PROCUREMENT

Procurement inhibitors are substantial covering a wide range of aspects.

General comment is that the procurement **regulations are drafted very rigidly** and too prescriptively to counter inexperience and corruption **when the appointment of skilled technical persons** with knowledge of the E&C product will be far more effective.

The **administration** by non-technical persons of the **procurement protocol** appears to be more important than the service **delivery outcome** it is trying to achieve.

1. **Illegal and inconsistent application** of transformation procurement rules.

The validity use of the B-BBEE scorecard in the procurement of EBEIS services as per the PPPFA requirements has been eroded by the wide range of **buyer specific** transformation driven **objectives**.

2. **Lowest Price Procurement Model with non-Technical Adjudication**

The matter of the **lowest bidder takes all** is **destructive** in the long term. Value for money to the client is by no means guaranteed.

3. **Project fragmentation**

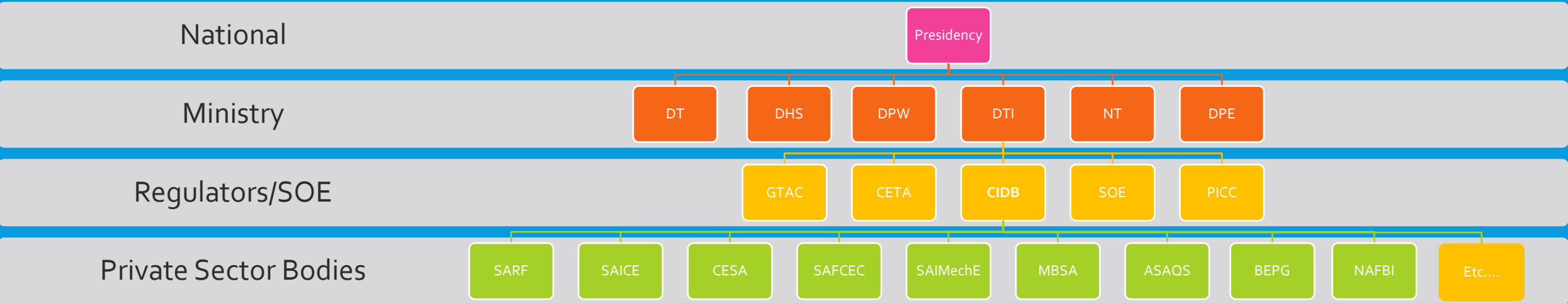
The drive by many state buyers of E&C services to break projects down into smaller ones is leading to **poor project delivery**, risk and cost increases.

SECTOR INHIBITORS: CONSTRUCTION MAFIA

- The construction mafia are **destabilizing** and **disrupting** most projects across the country resulting in **damage to property, loss of life, project delay** and **cost** increases.
- They employ **extortion tactics** that **threaten the safety** of the employees in the sector.
 - I. Chronic low growth, **unemployment**, poverty and the contractors abilities to utilise unskilled labour or low skilled companies is driving **increasingly opportunistic behavior** surrounding construction sites.
 - II. **policy uncertainty** from **Government** in relation to transformation procurement rules (in particular around the 30% issue)
 - a. Misunderstanding or misinterpretation of the how the 30% SMME allocation is to be spent by state, contractors and community;
 - III. **political exploitation** of community expectations with **promises** to the communities **not included** into procurement processesIV.
 - IV. **contractual risk shift** from Government onto contractors for any disruptions of this nature. Client not recognising the likelihood and consequence of the risk of disruptions caused by the 30% SMME spend in terms of their baseline risk assessments, and then transferring the risk to the Contractors through **forced acceptance of contract terms** in order to tender.
 - V. the unwillingness of the security services to intervene when called
 - VI. combined with a **general state of lawlessness** in the country has resulted in violent mafia styled extortion, destruction of property and loss of life at construction sites.



E&C SECTOR INHIBITOR- FRAGMENTED



THE PLAN FORWARD



PPGI: PUBLIC-PRIVATE GROWTH INITIATIVE

Purpose

The main purpose of this initiative is:

- to incite rapid growth in the SA economy and to serve as a catalytical intervention with pragmatic implementable projects;
- to rebuild and strengthen a relationship of trust and cooperation between the private sector and the government sector;
- to spur private sectors to organise and engage as such through their CEO's in particular and in that manner focus their engagement with appropriate and relevant government departments according to their sectoral specific needs.

PPGI: PUBLIC-PRIVATE GROWTH INITIATIVE

Where it all started

- Initiated by Johan van Zyl and Roelf Meyer
- 23 Sectors
- Engineering and Construction Sector – Webster Mfebe, Aubrey Tshalata and Russell Adams
- Current status:
 - Interaction when there is a serious crisis
 - No sustainability in activity
 - Sectors not always represented in crisis discussions,
 - Get all Sectors involved, let every sector speak for itself
 - CEO's of sectors needs to take the lead
 - Weak link between “business discussions, Government budget process and priority setting.

PPGI: PUBLIC-PRIVATE GROWTH INITIATIVE

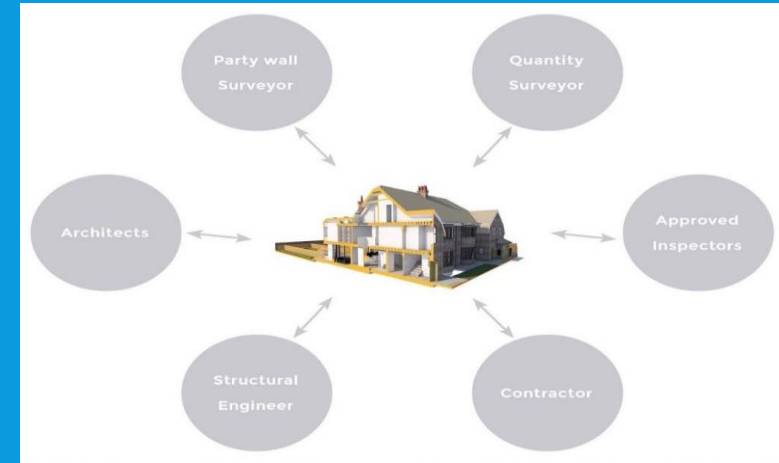
What needs to change?

- We need a structured interaction based on Government support and Sector delivery (Mutual beneficial relationship)
- A Sustainable process with clear KPI and deliverables
- Sector commitment from CEO's to the President based on a 5 Year Sector Plan
- Create a strong link between Government priorities, business enablers and Government planning and budget process
- Annual follow-up with President's Office to report and monitor progress by the sector CEO's
- Too many issues to address by Government. What are the 2 or 3 most important growth inhibitors to be addressed in each sector?

ENGAGEMENT OPPORTUNITY THROUGH PPGI PROCESS AND ACCESS

1. Consolidate our voice on common issues.

2. Through PPGI process engage with government on these issues.



ELEVATE THE SECTOR

- 1. Common voice on common issues.**
- 2. With gravitas to be heard and acted upon**
- 3. Look to other Sectors that have achieved this such as mining**
- 4. Concept of a Engineering & Construction ‘Indaba/Engagement Platform’**

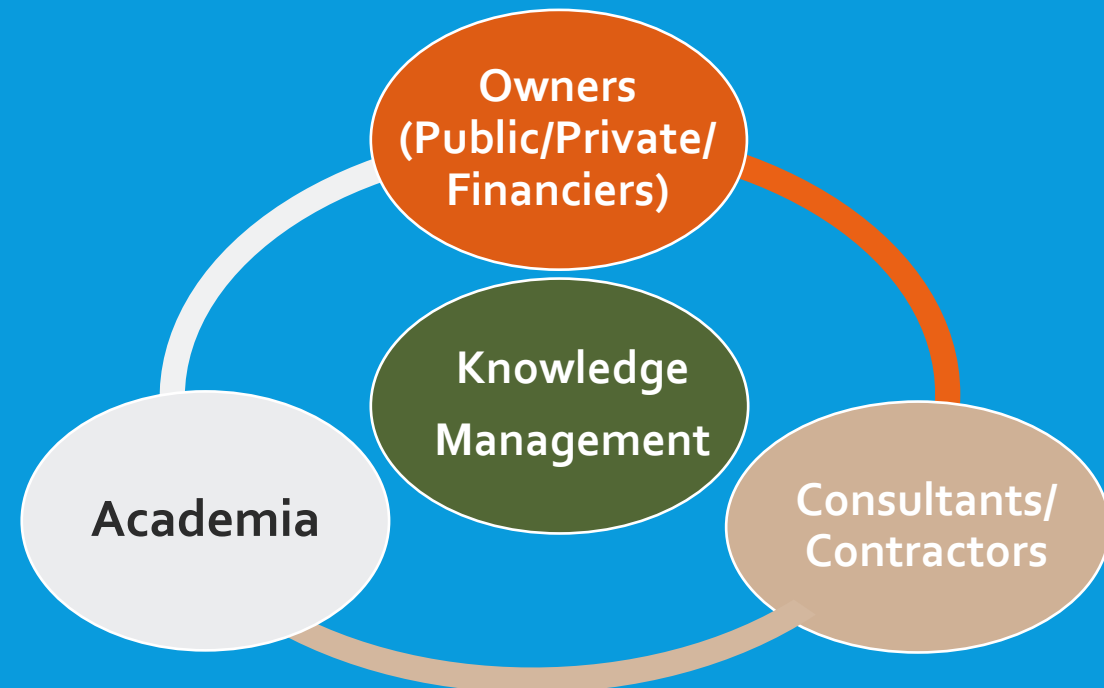
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PPGI and CII



Introduction to CII

- Launched in 2015
- Hosted at GSTM at UP
- Extension of CII (1983) hosted at Univ of Texas, Austin



CII Mission

The mission of CII is to provide a research and development platform to create and drive innovative solutions that tangibly improve business outcomes through an academically-based, disciplined approach.

MATERIALS MANAGEMENT

16%

The benefits of a materials management program results in 16% schedule improvement.

DESIGN PLANNING & OPTIMIZATION

6.1%

High use of constructability results in 6.1% cost improvement versus low usage and reduces project schedule by 7.5%.

PROJECT PLANNING

\$25

Each \$1 spent on the PDRI process can save \$25 in return.

FRONT END PLANNING

\$3-\$10
payback

Front End Planning has a \$3-\$10 payback on every dollar spent.

CONSTRUCTION TECHNOLOGY

30-45%

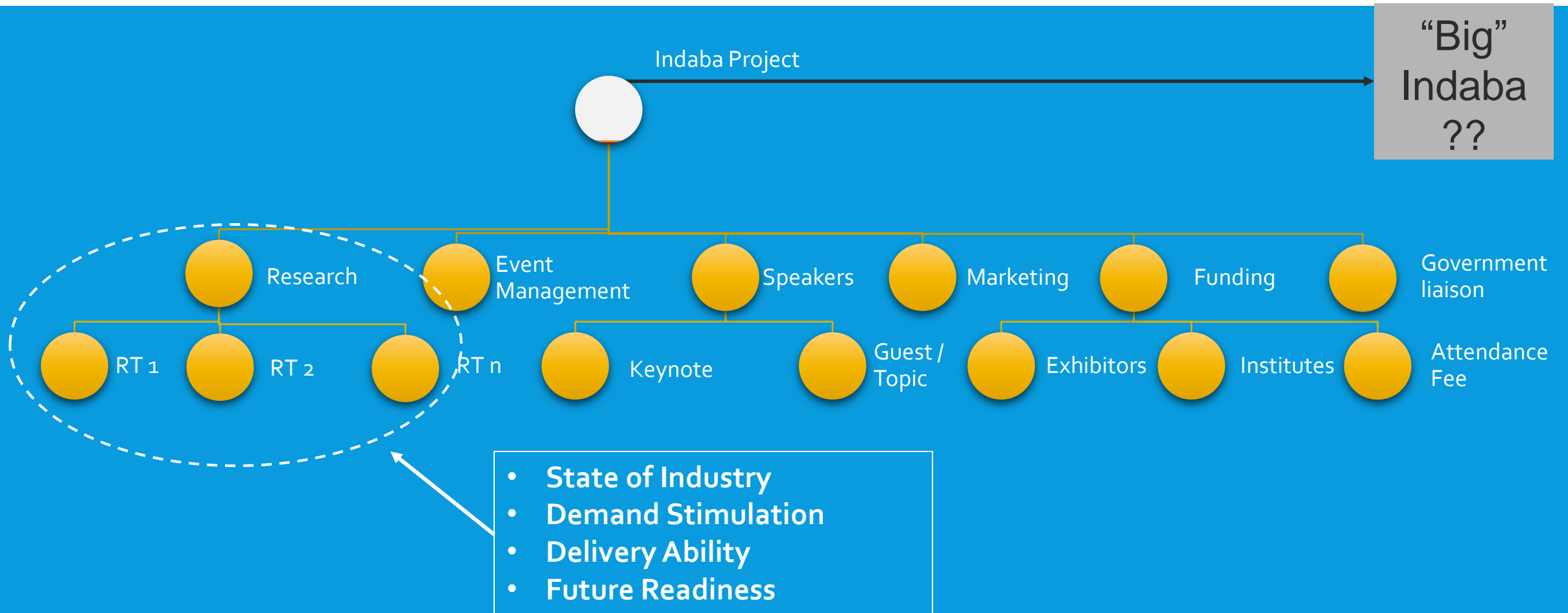
Adoption of proven technology can improve construction industry productivity by 30-45%, as well as improve material predictability and reliability.

CHANGE MANAGEMENT

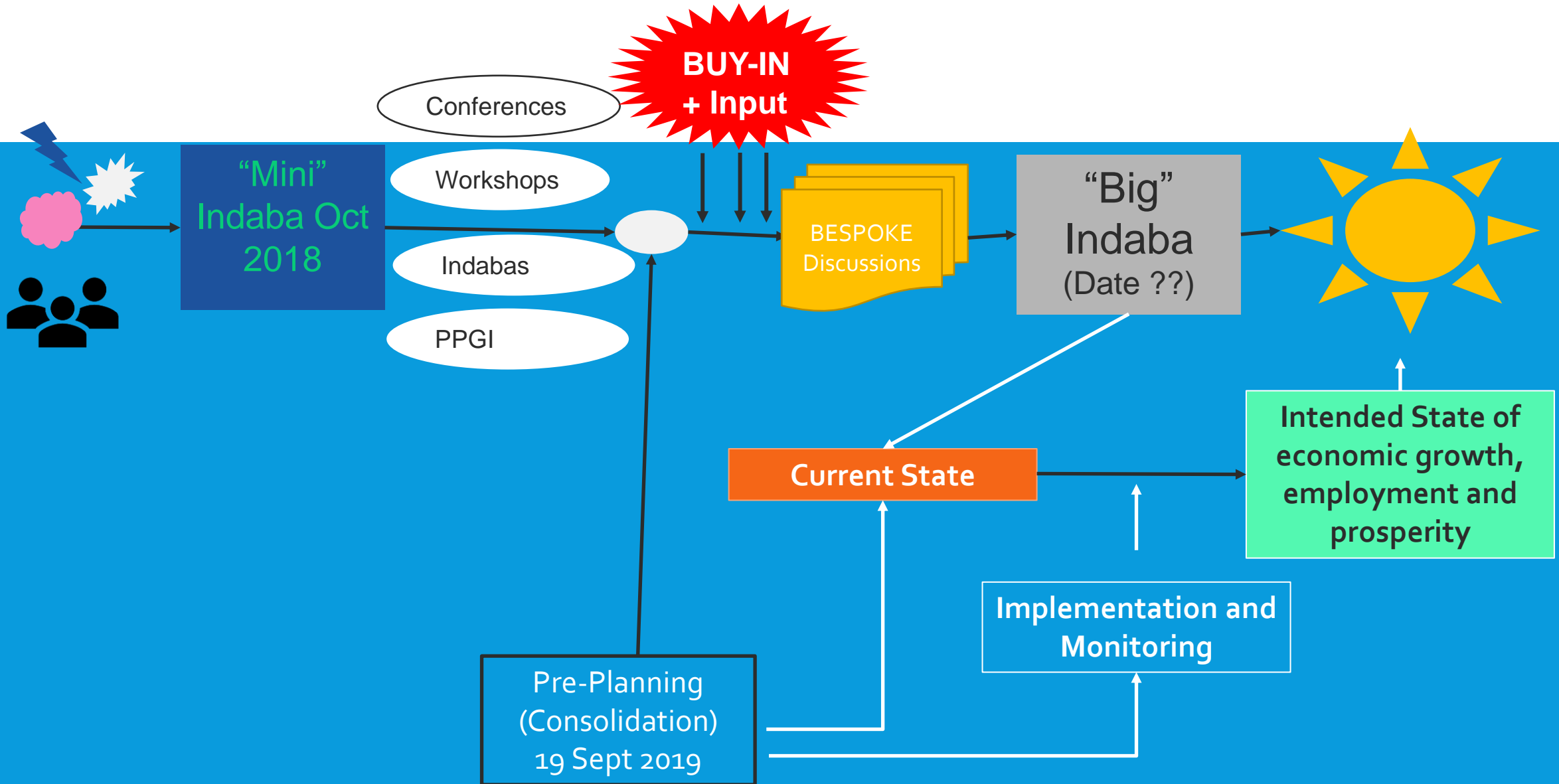
11.4%

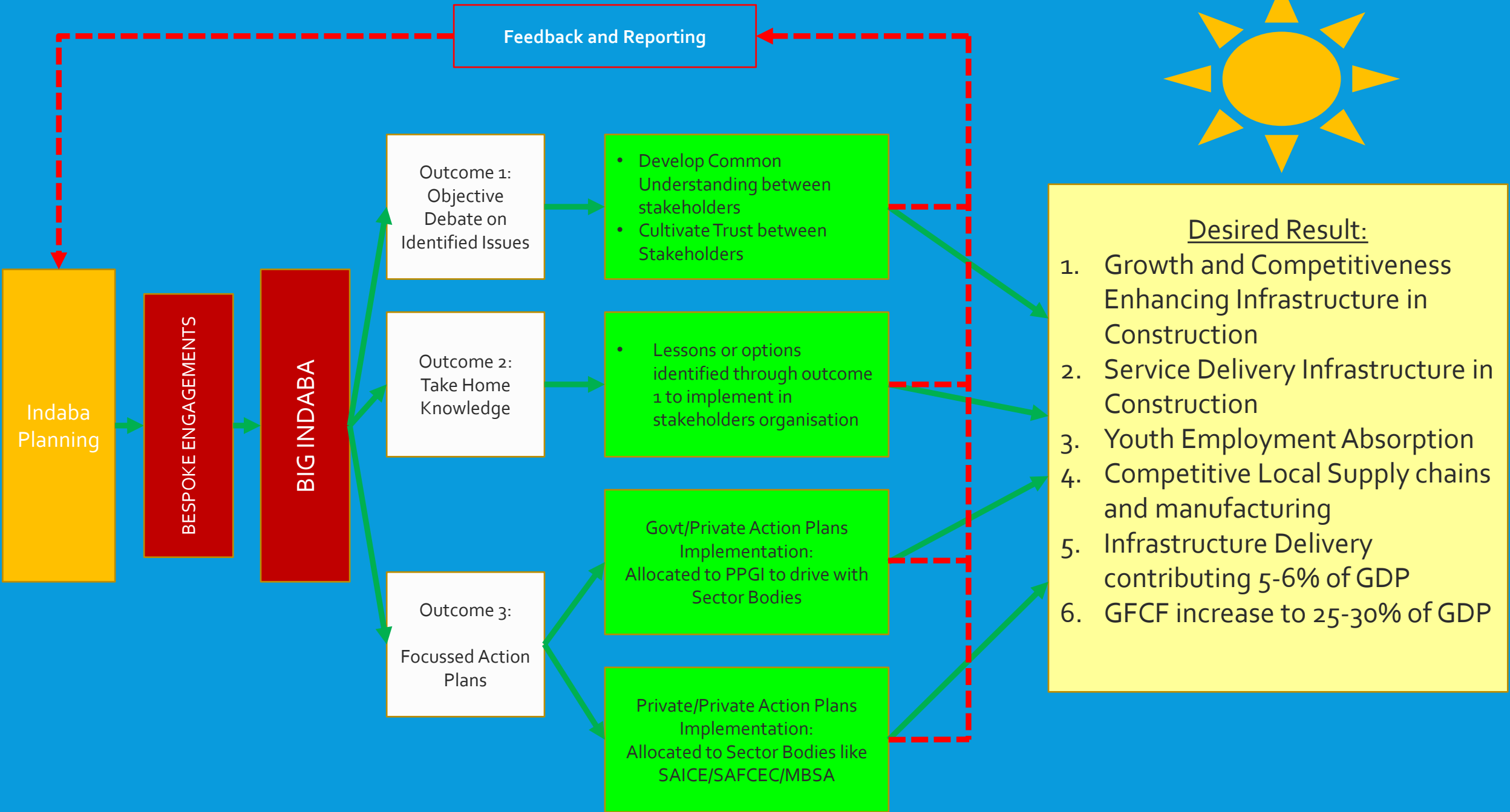
The CII Knowledge Base adds value to Change Management Practices through a 11.4% cost growth improvement.

CII 'INDABA' MODEL



ROADMAP





WAY FORWARD

ENGAGE

Immediate Term

- Create/Agree/Mandate a home for E&C Sector in the State
- Obtain commitment from state for E&C Sector negotiations on new Procurement Bill
- Agree on a Best Practice to Address Construction Mafia

Medium term

- Propose supplementation of Framework for Infrastructure Delivery and Procurement Management with private sector role

Longer Term

- Remove inhibitors for state technical capacity

THANK YOU