



THE VOICE OF CONSULTING ENGINEERING

MAPPING A SUSTAINABLE PATH FOR CONSULTING ENGINEERS AMID GROWING ECONOMIC CHALLENGES

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Friends, Alzine Masango, 76, and Beauty Cele, 90, are pleased with their new homes.





We Are Engineers ::
We are the engine that
moves the world.



Previous themes

- | | |
|------|--|
| 2011 | Partnering for growth |
| 2012 | CESA Engineers Unquestionably Ethical |
| 2013 | Sustainability is Everybody's Business |
| 2014 | Sustaining the consulting engineering profession is key to growing the economy |
| 2015 | Addressing socio-economic challenges through sustained infrastructure investment |

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- 1. State of Affairs in South Africa**
- 2. Mapping the path – Where to from here?**



SOUTH AFRICA LOOKING FORWARD TO

- ☐ SA is the most developed construction market in Africa second only to Nigeria
- ☐ Large-scale capital expenditure plans NDP to guide infrastructure construction
- ☐ Port and rail investment to continue
- ☐ Housing investment especially housing stock to raise living standards
- ☐ SA is still the gateway to the SADC region

Source: 2015 CESA Infrastructure Indaba

NEGATIVE SENTIMENTS

- ❑ Low GDP
- ❑ Load shedding curtailing economic growth
- ❑ Infrastructure spending backlog of R850bn over the next 3 years
- ❑ R4 trillion required over the next 15 years
- ❑ Lack of good governance
- ❑ Labour strikes
- ❑ Ongoing drought



POSITIVE OUTLOOK

- ❑ Achieving elements of NDP
- ❑ Significant infrastructure investment Transport, Power, Water and ICT
- ❑ 26% of total capital investment is made by the private sector and 74% by the public sector



POSSIBLE WAYS TO MEET THESE CHALLENGES

- ☐ Private sector should increase its investment in public infrastructure development
- ☐ Maintenance of existing infrastructure
- ☐ Addressing inefficiencies in the Supply Chain Management system

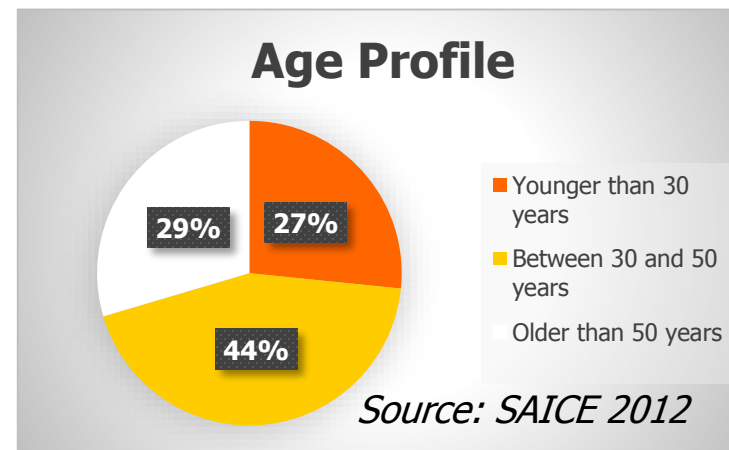
FURTHER CHALLENGES



**Investment status
is negative**



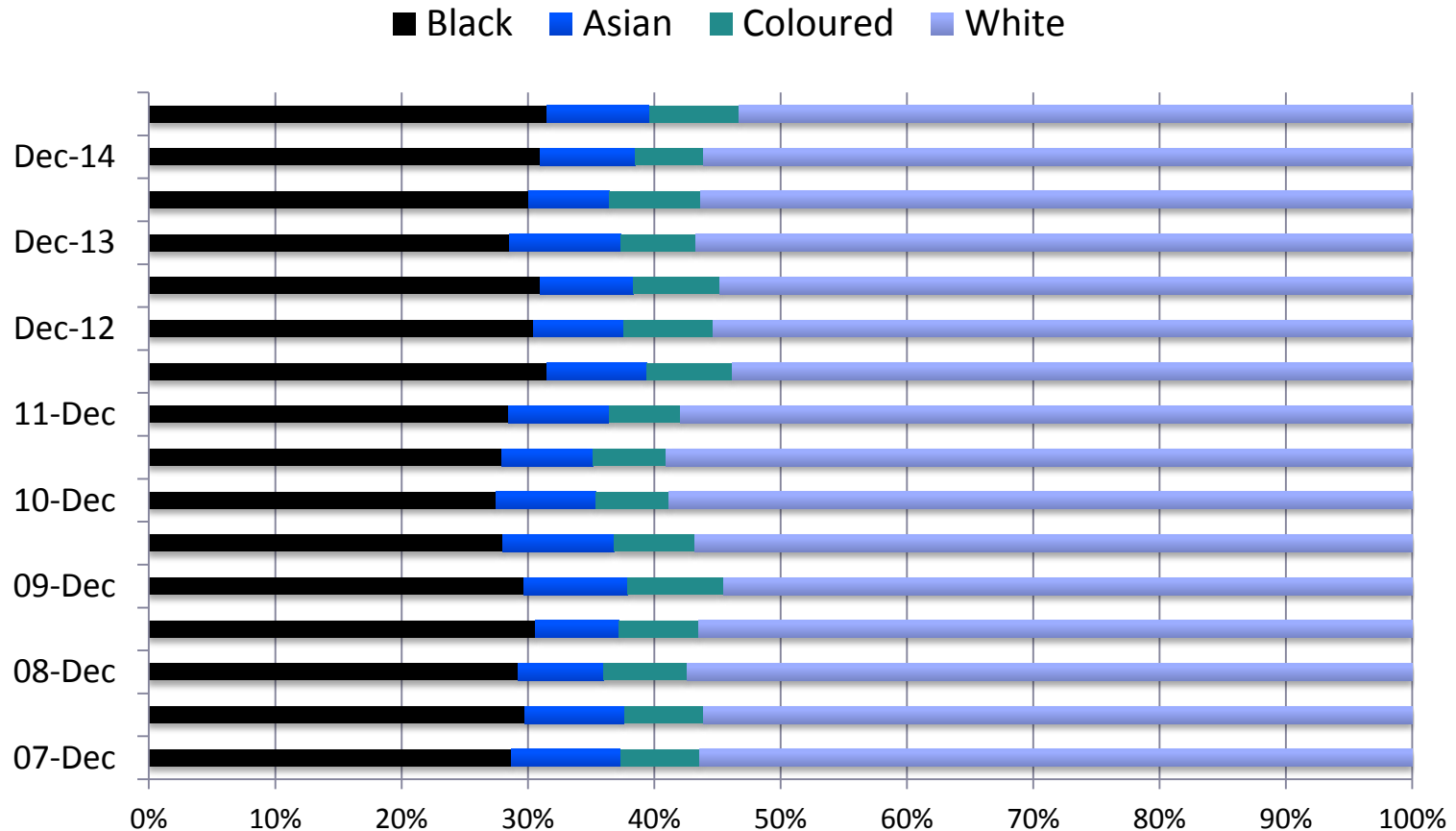
**Service
delivery
protests**



**Ave age –
38 years**

FURTHER CHALLENGES

Transformation
of industry – No
agreement on
scorecard for
Construction
Sector Charter
Council

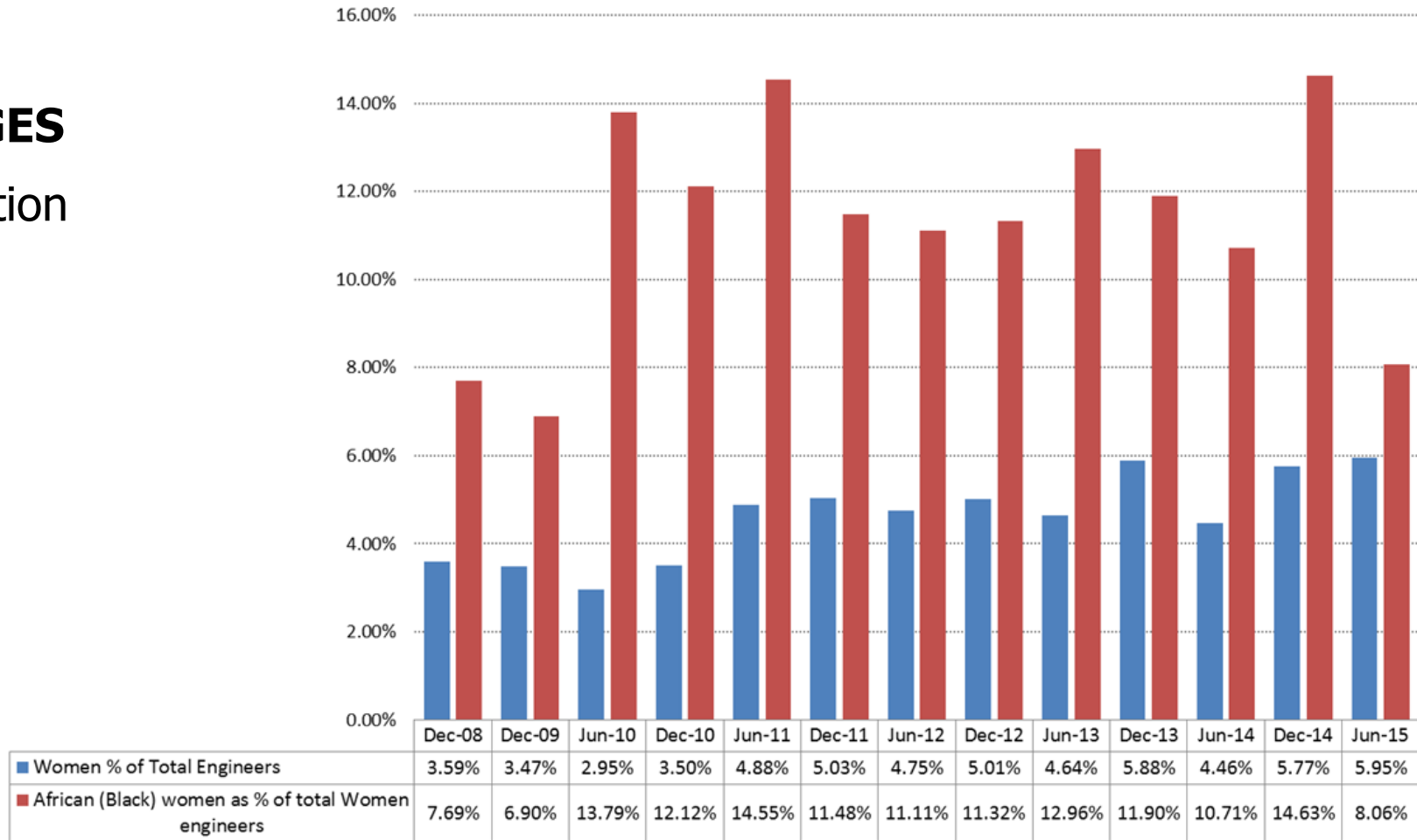


Source: Bi-annual Economic and Capacity Survey , June 2015

FURTHER CHALLENGES

Transformation
of industry

**The changing role of female ENGINEERS in the
South African private consulting engineering industry**



Source: Bi-annual Economic and Capacity Survey , June 2015

SUMMARY

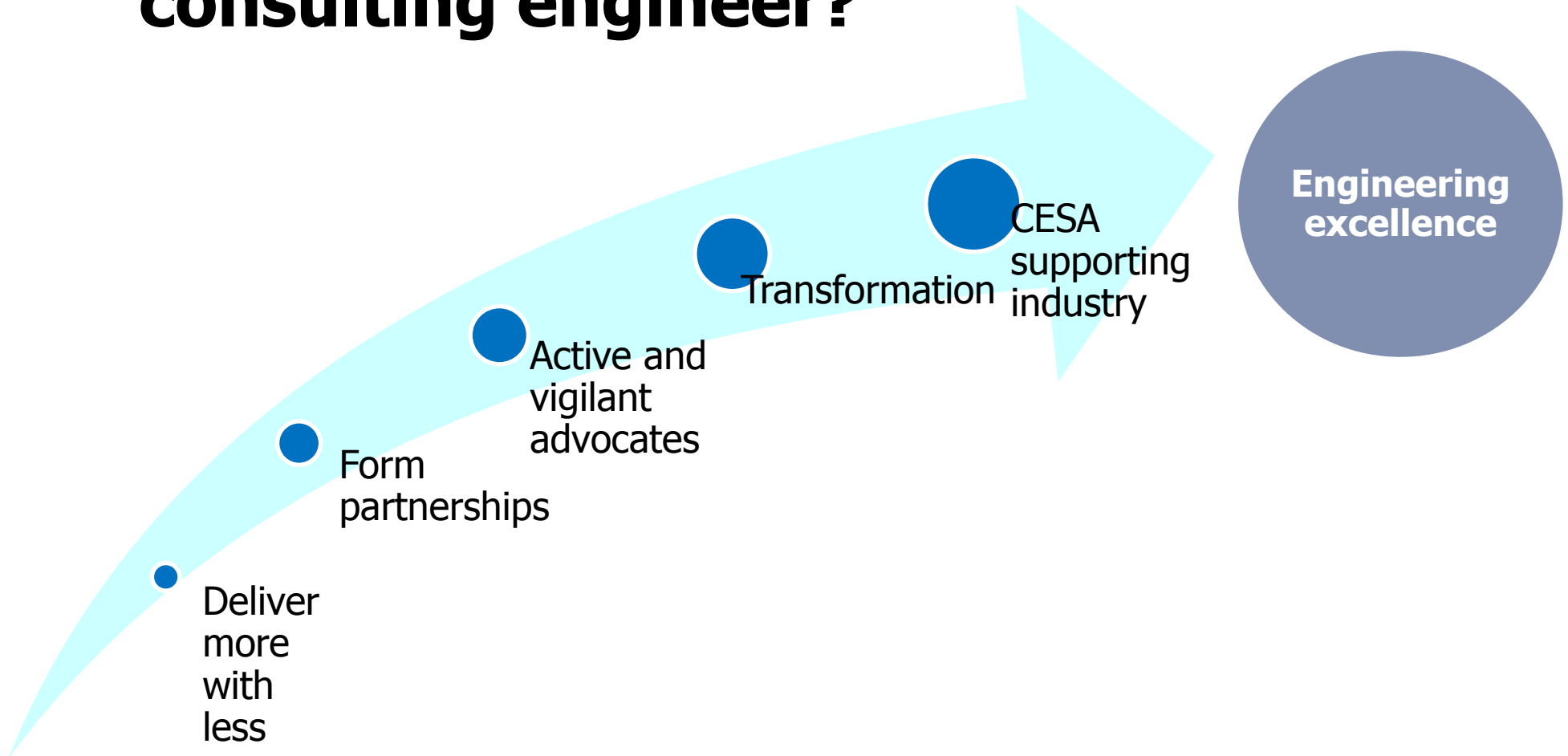
- ❑ The economic outlook, coupled with limited technical skills, appears to be crippling and stifling the economy.
- ❑ The project pipeline looks good, but can it be delivered?
- ❑ The profession is aging, but there is also significant growth in the number of young engineers.

2016

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What is the role of the consulting engineer?



Deliver more with less

- ❑ Innovative approaches
- ❑ Multi-professional teams
- ❑ Fast-tracking of young engineers with potential
- ❑ Improved bids and cost estimates makes procurement easier
- ❑ Get it right the first time
- ❑ Focus on quality
- ❑ Technical specialists and experts - continuous research and development
- ❑ Adapt to operate within a competitive environment



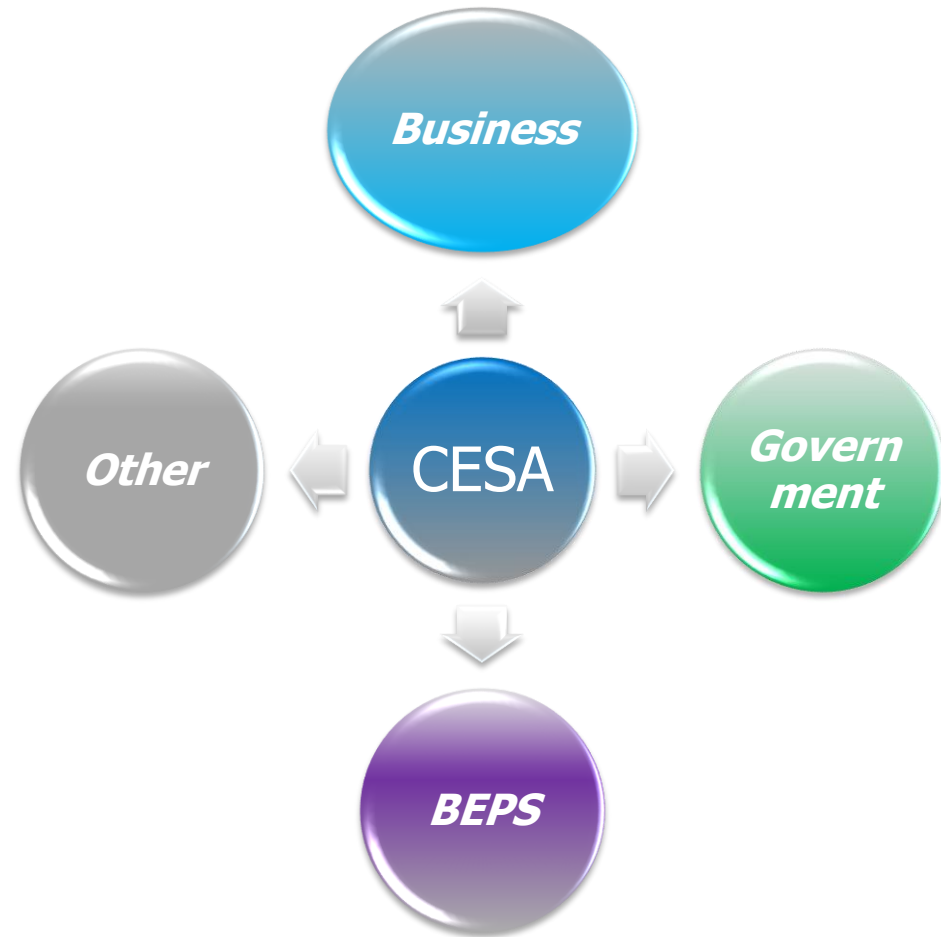
Deliver more with less

- ☐ Business as usual not enough
- ☐ Continue to be assessed whether we can deliver quality projects on time and on budget while meeting project specifications
- ☐ Already experiencing reduced profit margins
- ☐ Influence the consulting engineer's ability to produce quality work



MAPPING A PATH

Form partnerships



Active advocacy

- ☐ Monitoring compliance with Treasury standards
- ☐ Identify corruption
- ☐ CESA's legal fund - legal issues that affects industry at large.
- ☐ Engage about technical standards, procurement practices and overall best practice



Transformation

- ☐ Varied membership
- ☐ Sector contributes significantly to job creation
- ☐ Transformation is the way to do business in SA
- ☐ Not a short-term action, but have to accelerate it
- ☐ Continue to actively address transformation issues



Supporting the industry

- ☐ Engage at the highest level to get our view across
- ☐ Liaison committees with clients
- ☐ The School for Consulting Engineers
- ☐ Targeting strategic partnerships
- ☐ Make use of expert skill sets of members
- ☐ Transformation Committee
- ☐ Continue to pursue procurement matters



CONCLUSION

CESA

**Voice of Consulting Engineer
Pursuing the role of Trusted Advisor**

***Follow the path, be clear about the end destination, do
what we have to do, but do it really well***

