The Fourth Industrial Revolution is here - are South African executives ready?
Introduction

How do South African executives’ responses compare with those of their global counterparts when it comes to harnessing the full potential of Industry 4.0 to benefit their clients, their people, their organisations, their communities and society more broadly?

The survey polled more than 1,600 C-level executives across 19 countries—including 100 respondents from South Africa. South African executives stood out from their global counterparts in the low level of influence they say their organisations have on social issues; their strong belief that the workforce is trending toward a gig economy; their feeling that technologies will replace humans rather than augment them; and their lack of confidence in their organisations’ preparedness to address Industry 4.0 issues.

Following are some specific examples of where South African executives stood out compared with their global counterparts.
Most executives in South Africa are optimistic about the society that will be created by the Fourth Industrial Revolution, but not as optimistic as their global counterparts. Only 72 percent believe that Industry 4.0 will lead to more social and economic equality and stability, compared with 87 percent of executives globally. The other 28 percent of South African executives (compared with 13 percent globally) stood out for their belief that Industry 4.0 will bring social upheavals and increased income inequality—among the highest degree predicting such consequences globally.

With respect to how their organisations will impact that future society, South African executives do not believe they have as much influence over social aspects as execs globally, including social and geographic mobility, becoming change agents for a level and fair marketplace, serving underserved markets or environmental sustainability (see Figure 1).
Figure 1. To what degree does your organisation consider itself able to influence the following issues? (Respondents who answered “to a significant degree”)

- Delivering the best possible product/service to customers: 59% (South Africa), 60% (Global)
- Delivering strong financial results in the short term: 29% (South Africa), 25% (Global)
- Delivering strong financial results in the long term: 28% (South Africa), 36% (Global)
- Education/training/lifelong learning: 14% (South Africa), 12% (Global)
- Social and geographic mobility: 12% (South Africa), 17% (Global)
- Becoming an agent of change for a level and fair marketplace: 11% (South Africa), 24% (Global)
- Serving underserved markets/accessibility/affordability: 10% (South Africa), 19% (Global)
- Environmental sustainability: 10% (South Africa), 10% (Global)
Doubts over readiness for Industry 4.0.

South African executives express greater doubt about their organisations’ readiness to fully harness the changes associated with Industry 4.0 than the survey population at large. Only 4 percent of executives in South Africa feel highly confident, compared with 14 percent of executives globally. Further, only 2 percent of South African executives are highly confident that they can act as stewards for their organisations during this time of change, compared with 33 percent of global executives.

Bigger impact from regulation.

Looking out at areas that will impact their organisations most in the next five years, South African executives are most focused on the changing regulatory environment, slightly more so than the global average. They are also more concerned about some aspects of Industry 4.0, such as more powerful and tech-savvy customers, but less concerned with the emergence of new businesses or delivery models (see Figure 2).
Figure 2. Which of the following issues will have the greatest impact on your organisation over the next five years?

(Select up to 3)

- **Changing regulatory environment**
  - South Africa: 46%
  - Global: 41%

- **More powerful and tech-savvy customers**
  - South Africa: 37%
  - Global: 30%

- **Smart and autonomous technologies**
  - South Africa: 30%
  - Global: 31%

- **Emergence of new businesses or delivery models**
  - South Africa: 30%
  - Global: 40%

- **Evolving economic/trade landscape**
  - South Africa: 29%
  - Global: 32%

- **Blurred lines between the physical and digital worlds**
  - South Africa: 26%
  - Global: 29%

- **Potential geopolitical instability**
  - South Africa: 26%
  - Global: 21%

- **Uncertain impact on workforce**
  - South Africa: 25%
  - Global: 22%

- **Blurred lines between industries**
  - South Africa: 24%
  - Global: 27%

- **Increasing threat of cyber risk**
  - South Africa: 23%
  - Global: 24%
Talent and the Workforce

Trending toward gig economy and technology replacing humans.

Three-quarters (73 percent) of executives in South Africa see a future where autonomous technologies will replace human workers rather than augment them, compared with less than half (47 percent) of global executives. Perhaps unsurprisingly, South African executives also believe more strongly than execs globally that the workforce is trending toward contractual/temporary employees rather than full-time, permanent workers (see Figure 2).

Confidence in education and employee training.

South African execs expressed greater confidence than their global counterparts that the current education system will prepare workers for Industry 4.0, and they believe that their current employees can be retrained to have the skills required in the new era (see Figure 2).

Lower level of workforce preparedness.

While still a majority, only 63 percent of South African execs believe they are doing everything they can to create a workforce for Industry 4.0, compared with 86 percent of
Figure 2. Which of the following statements about the Fourth Industrial Revolution’s impact on the workforce is more true? (Select one from each set)

- We are doing everything we can to create a workforce for the Fourth Industrial Revolution
- We are not focused enough on creating a workforce for the Fourth Industrial Revolution
- We will need a complete rethinking of social/labor contracts
- The current labor laws and contracts will generally continue to work

South Africa

- 63%
- 56%

Global

- 86%
- 44%

- 37%
- 40%
Our current education system will continue to work and prepare individuals for Industry 4.0.

We will need a complete rethinking of the education system.

Our organisation’s relationships with our workforce will trend toward contractual, temporary and/or ad hoc employees.

Our organisation’s relationships with our workforce will trend more toward sustained, full-time employment.
The skills that we require of our employees will evolve much more rapidly than how they do today.

The majority of our workforce can be trained to have the skills we will require.

The skills that we require of our employees will evolve relatively similarly to those of today.

We will need to hire new/different people to have the skills we will require.
Technology not perceived as a competitive advantage.

Only 6 percent of respondents from South Africa consider technology a key competitive differentiator, compared with 20 percent globally. This is a key variance because executives’ approach to technology appears to be a leading predictor of how well prepared they believe they are for Industry 4.0 and for making the business case for new technologies.

Less confidence in preparedness for Industry 4.0-related issues and challenges.

Executives in South Africa feel less ready for a number of other Industry 4.0-related issues and challenges than their global counterparts (see Figure 3).
Figure 3. How prepared is your organisation to address the following issues?
(Respondents who answered, “highly prepared”)

- **Blurred lines between the physical and digital worlds**
  - South Africa: 58%
  - Global: 49%

- **Increasing threat of cyber risk**
  - South Africa: 24%
  - Global: 22%

- **Changing regulatory environment**
  - South Africa: 21%
  - Global: 28%

- **Evolving economic/trade landscape**
  - South Africa: 16%
  - Global: 21%

- **Potential geopolitical stability**
  - South Africa: 14%
  - Global: 17%

- **Emergence of new businesses or delivery models**
  - South Africa: 10%
  - Global: 20%

- **Blurred lines between industries**
  - South Africa: 8%
  - Global: 17%

- **More powerful and tech-savvy customers**
  - South Africa: 8%
  - Global: 20%

- **Uncertain impact on workforce**
  - South Africa: 7%
  - Global: 25%

- **Smart and autonomous technologies**
  - South Africa: 4%
  - Global: 15%
Figure 4. How capable is your organisation in addressing the following technology challenges today?

(Respondents who answered, “highly capable”)

- Using advanced technologies to enable our employees to be more efficient: 62% South Africa, 47% Global
- Tapping into the broader ecosystem of public and private infrastructure in a way that effectively harnesses the capabilities of advanced technologies: 28% South Africa, 29% Global
- Developing the right capabilities in-house to deploy and use advanced technologies holistically across the organisation: 22% South Africa, 24% Global
- Enabling mobilization of a larger and more-diverse ecosystem of participants to deliver value to our customers: 19% South Africa, 33% Global
Challenging our basic assumptions about what is required for business success

Using advanced technologies to solve pressing organisational challenges

Harnessing the capabilities of advanced technologies to drive smart manufacturing

Redefining our relationships with our customers

Incorporating advanced technologies sufficiently into our operations to effectively foster the movement of goods and services across our supply network

Planning for and addressing the effects that technology-driven changes have on our organisational structure and employees
Methodology

This research is based on a survey of 1,603 global executives—100 of whom were based in South Africa—conducted by Forbes Insights in the second half of 2017. Survey respondents represented 19 countries from the Americas, Asia and Europe, and came from all major industry sectors. All survey respondents were C-level executives, including CEOs/presidents (16%), with the rest evenly divided among COOs, CFOs, CMOs, CIOs and CTOs. All executives represented companies with revenue of US$1 billion or more, with more than half (53%) coming from companies with more than US$5 billion in revenue.

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