Technological Trends in a Disruptive Age

Gerhard Botha
Head of MES Architecture
Jun 2016
Contents

- Introduction to Sasol
- Trends about Trends
- Business Trends
- Technology Trends
- The Question
Sasol is an international integrated energy and chemicals company that leverages the talent and expertise of our more than 32 400 people working in 37 countries. We develop and commercialise technologies, and build and operate world-scale facilities to produce a range of high-value product streams, including liquid fuels, chemicals and low-carbon electricity.

Secunda Regional Operating Hub, South Africa
Our global presence

We have exploration, development, marketing and sales operations in 37 countries around the world.

The map reflects a broad indication of Sasol's global presence.
Our value-chain based operating model aligns our businesses according to a single value chain, focusing on the production of liquid fuels, high-value chemicals and low-carbon electricity.
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Innovation is Exponential

Innovation Cycles Over Time

Maintaining momentum

Confidential

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Innovation is Exponential

Innovation Cycles Over Time

Innovation Adoption Over Time
Innovation is survival
Innovation has a long tail

1889 - 1991

1982 – 2014

1998-
Innovation has a long tail
Contents

Introduction to Sasol

Trends about Trends

Business Trends

Technology Trends

The Question
Short to Medium Term Business Trends

- Increased Social Investment
- Infrastructure Failing
- Increased Legislative Compliance
- Climate Change
- Core Process Outsourcing
- Manufacturing as a service
- Cost Pressure
- Commoditization
- Low Commodity Prices
- Lower for Longer
- Chemicals & Mining

Short-Term Technology Trends

Maintaining momentum
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Short-Term Technology Trends (~2016-2020)
Medium-Term Technology Trends (~2020-2035)

- DIY Manufacturing
- 3D Printing
- H-C Connection
- Automation
- Machine Intelligence
- Virtual Visualization
- No More Screens Holographic
- Robotics Assistance
- Exo-Skeletons & Assistants
Long-Term Technology Trends (~2035-2050)
### Other Interesting Technology Trends

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<thead>
<tr>
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<th>2020-2030</th>
<th>2030-2040</th>
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<td><strong>Transportation</strong></td>
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- **First human/s on Mars**
- **First colony on Mars**
- **First designer baby**
- **Slow down of aging process**
- **Personalised medicine**
- **Commercial self-driving cars**
- **Luxury electric vehicles**
- **Autonomous cars**
- **Electric vehicles**
- **Electronic learning aids**
- **Multiple online currencies**
- **Online tertiary education**
- **Online education**
- **Global online currency**
- **Asteroid farming**
- **Space Energy**
- **Solid-state batteries**
- **Fossil Fuel Energy**
- **Green Energy**
- **Medical**
- **Education**
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- **Space**
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In Summary

- No IT
- No Manufacturing
- No Shops
- No People
- No Cars
- No Cash
### Key SBU deliverables in each of the time horizons

#### 1. Value Creation
- Enhance profitability through refining and optimization of existing operations.
- Implement cost-saving initiatives.
- Strengthen upstream activities.
- Improve asset utilisation.
- Strengthen downstream activities.

#### 2. Consolidation and Initial Growth
- Achieve scale and scope benefits.
- Diversify operations to reduce risk.
- Invest in new technologies.
- Expand into new markets.
- Strengthen relationships with suppliers and customers.

#### 3. Further Consolidation and Growth
- Enhance operational efficiency.
- Implement advanced analytics.
- Diversify into new products and services.
- Strengthen customer relationships.
- Invest in research and development.

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#### Mid-Term Strategy
- Implement strategic initiatives.
- Enhance operational efficiency.
- Diversify product offerings.
- Strengthen customer relationships.
- Invest in innovation.

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#### Long-Term Strategy
- Focus on sustainability.
- Invest in new technologies.
- Strengthen market presence.
- Enhance operational efficiency.
- Invest in innovation.
The Question

How do you prepare for disruption?
Forward-looking statements

Sasol may, in this document, make certain statements that are not historical facts and relate to analyses and other information which are based on forecasts of future results and estimates of amounts not yet determinable. These statements may also relate to our future prospects, developments and business strategies. Examples of such forward-looking statements include, but are not limited to, statements regarding exchange rate fluctuations, volume growth, increases in market share, total shareholder return, executing our growth projects and cost reductions, including in connection with our Business Performance Enhancement Programme and Response Plan. Words such as "believe", "anticipate", "expect", "intend", "seek", "will", "plan", "could", "may", "endeavour", "target", "forecast" and "project" and similar expressions are intended to identify such forward-looking statements, but are not the exclusive means of identifying such statements. By their very nature, forward-looking statements involve inherent risks and uncertainties, both general and specific, and there are risks that the predictions, forecasts, projections and other forward-looking statements will not be achieved. If one or more of these risks materialise, or should underlying assumptions prove incorrect, our actual results may differ materially from those anticipated. You should understand that a number of important factors could cause actual results to differ materially from the plans, objectives, expectations, estimates and intentions expressed in such forward-looking statements. These factors are discussed more fully in our most recent annual report on Form 20-F filed on 9 October 2015 and in other filings with the United States Securities and Exchange Commission. The list of factors discussed therein is not exhaustive; when relying on forward-looking statements to make investment decisions, you should carefully consider both these factors and other uncertainties and events. Forward-looking statements apply only as of the date on which they are made, and we do not undertake any obligation to update or revise any of them, whether as a result of new information, future events or otherwise.

Please note: A billion is defined as one thousand million. All references to years refer to the financial year ended 30 June. Any reference to a calendar year is prefaced by the word "calendar".

Comprehensive additional information is available on our website: www.sasol.com