

Anglo American - Summary

New technology development in the primary sector

Introduction

Anglo American is a UK public limited company. It is one of the world's leading mining companies. It works in the primary sector and is involved in exploration, extraction and processing of metals and minerals. Exploration and technology are key activities for Anglo American. It looks for new mineral sources and develops new technologies to gain competitive advantage. It is an important employer in Africa and Europe. Anglo American uses research and development (R&D) to develop new technology.

New technology development

New products and processes are created through innovation. Anglo American has a specialist unit – Anglo Research. This supports the wider Anglo American group and enables it to benefit from shared practices and emerging technology. As businesses develop, they look for improved ways of doing things. Sources of new ideas emerge through:

- customers
- staff
- university research
- other products
- competitors
- Research & Development (R&D) processes.

The phases of development may take place over several years. Anglo American uses a 'roadmap' to show the stages from initial problem to final implementation. Anglo Research engages in technology transfer across the whole group. This ensures the firm uses the best technology in the best way. Anglo American's Anglo Technical division provides the specialised engineering and technical skills to develop new products and processes. It aims to help Anglo American develop new exploration methods.

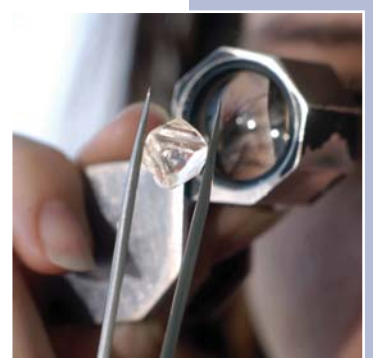
Research & Development

Research starts with a problem and collects and tests data to find a solution. Development involves working out the details of the solution. Anglo American uses its expert knowledge to develop ideas and solutions to technical problems. Anglo Research and Anglo Technical have five roles that support R&D. They:

1. support safe and sustainable development
2. review activities to make sure the right technology is used in operations
3. collaborate across the group to implement new technology that improves efficiency
4. identify best practice and set up common standards
5. support technical human resources.

From testing to launch

Computer modelling can test an idea with little cost. It may be necessary to create prototypes or working models for further testing. It is important that new ideas must also support sustainable development. At the same time, Anglo American needs new products and processes to give a good return on investment.



Influences on process development

A number of factors affect the R&D process:

- Cost is perhaps the most influential factor. Researching, developing and introducing new technologies to the market requires a lot of investment. It is important that the developments give a good return on investment to justify the expenditure and time involved.
- Changing technologies are another influence. They provide the firm with a different way of meeting customer needs. They also have a long-term influence on planning. Such developments may lead to new processes and the sharing of technology.
- Anglo American also takes a positive approach to corporate social responsibility. Every choice is assessed for its economic, social and environmental impacts.

Conclusion

To be competitive in its industry, Anglo American depends on access to a constant supply of mineral deposits. These must be extracted in a cost effective way. It seeks to develop new technology and processes to identify and extract these deposits in order to stay ahead of competition. These new processes rely on ideas, research and technological development.

