Appendix A: Technology definition

A broad definition of technology can graphically be given by an illustration shown in Figure A1.

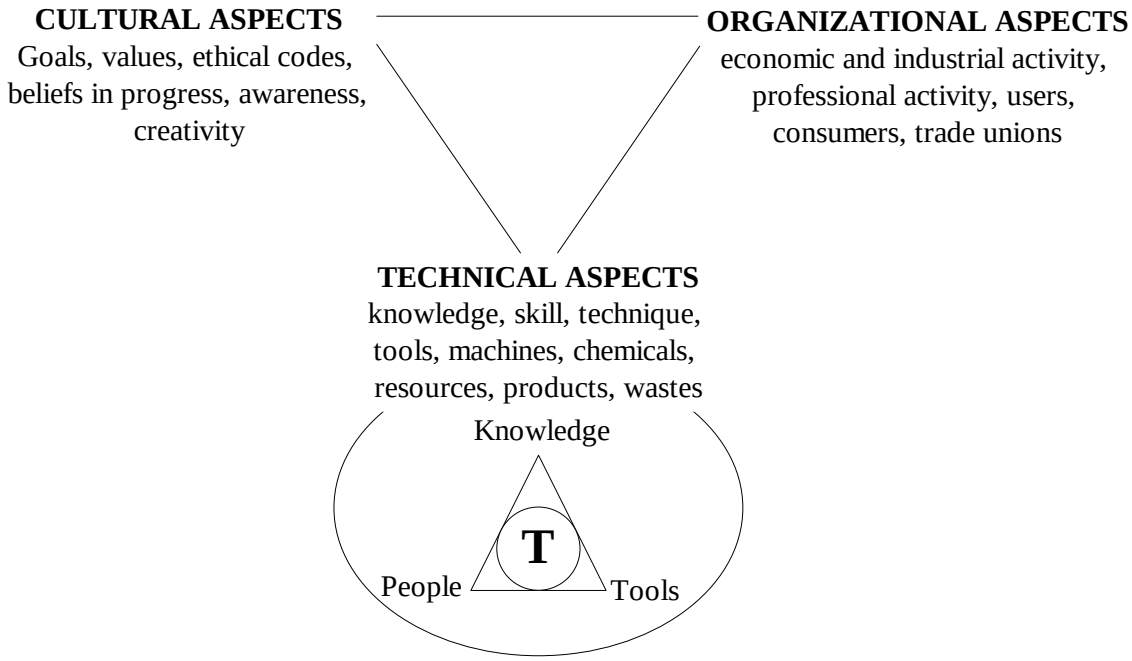

Figure A1. The broad definition of technology

The definition of technology used during this dissertation was a bit more narrowed down and can be seen as a definition under the "Technical Aspects" of Figure 1A. The other aspects are however also indirectly accounted for through people and stakeholders that come from a certain background and who has a specific culture. They also function within an organizational system and evaluate subsystems on the basis of economic and other indicators/standards.

The definition of technology, referred to as the "Technology Triangle" in this dissertation, can graphically be given by an illustration shown in Figure A2.

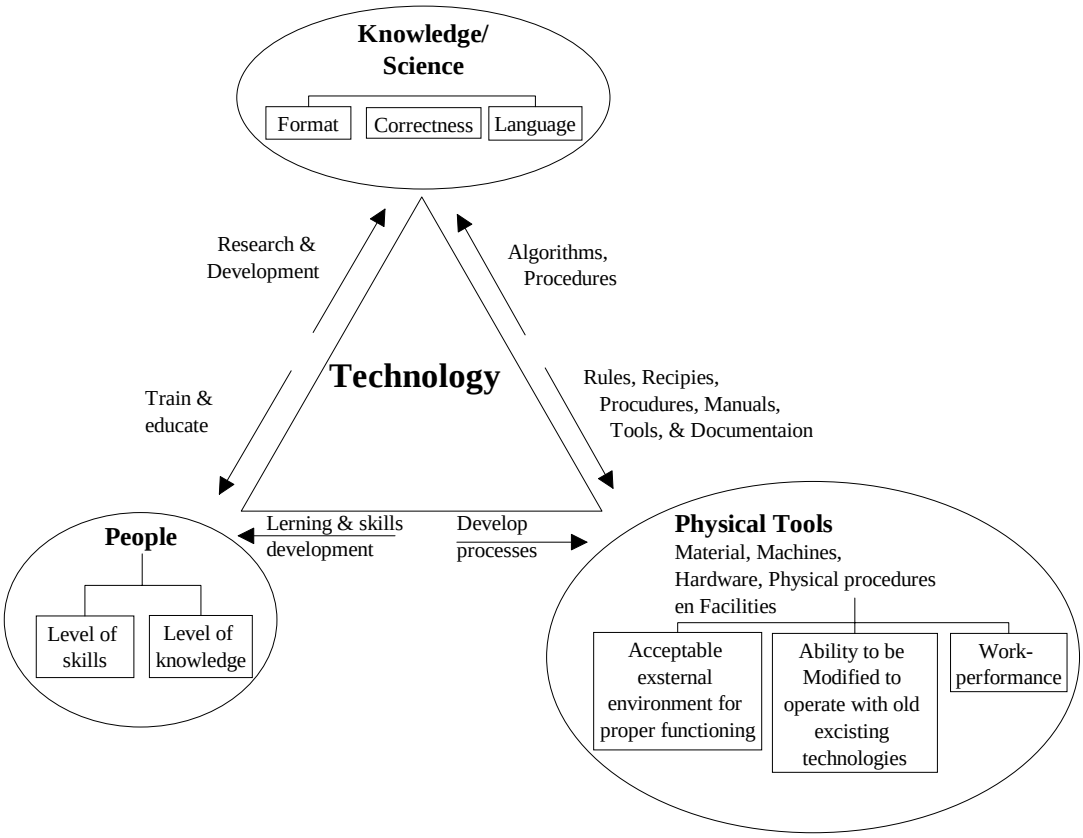

Figure A2. A Diagrammatic Definition of Technology (The technology triangle)

The triangle of technology has three interdependent and interacting components namely: People, Technical Knowledge, and "Tools" or hardware. The effectiveness of the technology utilization depends largely on the interaction between the three components. The fact that the three components are unique for each country or company needs to be stressed here. These differ at:

Technical Knowledge: The format, correctness, and language of the knowledge being used by a country might differ from another. Some countries rely on CD ROM drives with Internet based updated information which provides very up-to-date and correct data that is available and easy to access. Other countries still use stores with records on paper and confusing registries. This might become a very important advantage/disadvantage especially for a fast moving technology like telecommunications.

People: People involved, definitely plays an extremely important role. Their level of education and technological skill level can determine the ability to fully utilize the technology and also to modify it for operation with other existing and older technologies. Without the right people the technology will never be utilized fully.

Physical Tools: Physical tools are referred to as material machinery, hardware, physical procedures and facilities. Conservatively, this component is considered as the most important aspect of the technology because a direct value in Rands can be attached to it. This is a very dangerous mistake to make because all three components deserve equal importance. A country/company's ability to afford plays a role but this does not necessarily determine the effectiveness of the technology utilization process.