The aim of this paper is to analyzes the technological infrastructure in Brazil, seeking to identify “industrial complex” that is, we seek to sub-sectors of the industrial structure with strong links between them in the form of flow of goods and services. Following the classical studies of Chenery and Watanabe (1958), Leontief (1965) and Simpson and Tsukui (1965), seeks to isolate the network of relations in these sectors of input-output matrix using successively the methods of matrix triangularization. As observed in these seminal works, we notice the existence of fundamental structure of production that serves to evaluate possible structural change. The most important result of this paper is that over the period analyzed (1996-2005) we can see some structural changes in the Brazilian production chain suggesting a possible de-industrialization.