Filière Analysis as a tool for a systematic approach for collecting information needed for a sustainable design approach: A Case Study for IRANI Papel e Celulose. Florianópolis, Brazil.

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Abstract

Inside our Knowledge sosiety the most important exchange subject is information. Nevertheless, the established frame suggests a continuous increase in data circulating through our computer networks, making more and more difficult to organize then. Terms like *datawarehouse*, *data mining*, and others, inspires our concern with this kind of problem.

We are living in times where the communication media is able to offer, to a decision maker or a planner, the desired amount of information. Modernity problems include how to systematize the gathered information, organizing it, and making clear what is relevant or not. A large amount of information is usually as bad as a few of them.

This article intends to offer a methodology about how to organize the available information in such a way that one can make decisions or elaborate plannings toward a sustainable production with minimal residuals.

In order to do so, we based our proposal on Filière Analysis. Filière Analysis is an Economic Engineering and a Production Engineering tool, a French version of Macroeconomics. The difference is that instead of using indicators such as money per capta (with no meaning at all), one talks about protein per capta, an indicator that can tell about how people are feeding thenselves

In order to take into account environmental problems we enriched our model with Life Cycle Analysis. Recognizing the difficulty in doing so, we searched foa a more simplified analysis to make our proposal more operational.

The result is a theoretical construct that one can use as a checklist for organizing information, taking into account not only functional, aesthetical and economical aspects, but also questions related to the environment as well as social issues giving an orientation toward sustainability.

Finally we test the applicability of this construct for a Brazilian Company, situated in the west of Santa Catarina state, at the south of Brazil, that deals with celulosis and paper.