Business Foresight for a Multinational Paper Company -
From paper producer to platform provider

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1.   Project status

So far, the project has proceeded rather well. The definition of the work was somewhat suggestive and enabled a wide range of interpretations, and thus a lot of effort has been targeted for defining what we are actually doing. The original concern of not having enough information and sources has emerged as gratuitous and difficulties in the project have been related to huge of amount of available information and appropriate handling of the findings.

The project is fairly in schedule. The design of the project has shaped up quite clear and the project team has somewhat coherent view of what we want to say. So far, considering the suggestive initial state, the criticized way of designing the project through the project has worked out creditable well, but towards the end, it might be necessary to focus on writing down the findings we have discovered.

Weekly meetings with the project group have proved to be both an efficient and a creative framework of proceeding. Writing obligations have been divided among the project group and from now on we are concentrating on writing the final report.

2.   Findings and results

2.1.   Definition of the operational environment

Traditionally, paper has been a prevailing, or even obligatory, raw material for producing media products. Nowadays, and likely in the future, in several cases the word "obligatory" can be deleted as digital media offers competing solutions to enable products meeting the same consumer needs. For example, magazines, books, newspapers, etc. can be published on the Internet and when needed, both facts and tales can be shared through digital media.

Reflecting this initial position, we have defined the paper industry as an actor providing *platform* for producing *media products*. Digital media can be considered as a suchlike

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competing platform for producing media products that either provide an equal content or just meet the same needs. Thus, besides the demand for media products, the paper consumption depends on both which products consumers want to use and which platform these products are based on. As regards to actual topic of the work, *business foresight*, we have defined it as methods, tools and processes for anticipating 1) *What kind of media products and will consumers use in the future?* and 2) *What is the role of printed paper in these products?*

2.2.   Identified foresight methods and processes

During the project, several foresight methods have been identified. Below, the method families are listed shortly (Gordon and Glenn 2003):

- Statistical models and trend analysis

- Expert opinions (Delphi method)

- Scenarios

- Creative Workshops

- Screening of patent databases and publications

- Diffusion models and simulations

- Idea solicitation and "innovation stores"

Moreover, we will discuss typical characteristics of these methods and their use, and note some remarks on the actual foresight processes. Benchmarking of the methods and their applications will also be considered in view of dimensions such as *Qualitative – quantitative, Continuous – discontinuous, Explorative – action oriented, Bottom up – top down.*

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2.3. Overview on the current research

A vast majority of research papers on newsprint and printing & writing paper demand are either multi-client studies conducted by private consultancies (Jaakko Pöyry, URS Forestry, to name a few) not available in public or clandestine outcomes of long-term market research in private companies. However there are also public actors, such as FAO of UN, several non-profit corporations, forestry unions, newspaper unions and postal unions for example, which have published research on issues related to paper demand. Variations between the outcomes and demand projections are significant.

Some of these studies employ proprietary models (e.g. He & Barr 2004) leaving the methodological issues concealed. Many of the public projections employ simple econometric models (Hetemäki & Obersteiner 2001) unable to cover issues such as substitutive technologies. Consultancies have provided some information about their working methods into public. For example Jaakko Pöyry's JP Viewpoint (Leskijärvi et al. 2005) is an iterative process where scenarios are elaborated jointly with clients to complement the consultancy's baseline projection.

2.4. Identified factors affecting consumer media behavior

In the study, we have identified five different groups of factors affecting consumers' media usage behavior and buying decisions, as illustrated in Figure 1.
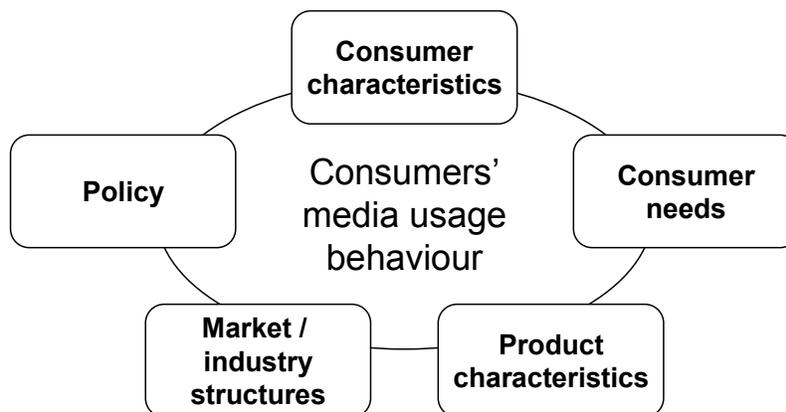

Figure 1: Factors affecting consumers' media usage behaviour

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Consumer characteristics include demographic factors such as age, income, education, and literacy. *Consumer needs* are related to the ways consumers want to use and be reached by media products, for example the place of use, time of use, function of use etc. *Product characteristics* describe the alternative media products in terms of factors valued by the consumers, including e.g. interactivity, availability, usability, and price.

Market structures and the value systems of publishers, advertisers, and content providers have also an effect on consumers' media behavior. *Policy* issues related to e.g. taxation, education, environmental aspects, and regulation of the media sector can also play a major role in accelerating or hindering the adoption and usage of media products.

2.5.   Cases

As a part of this project, we have developed four applications illustrating the use of foresight methods as a strategy tool.

Firstly, providing an analytical framework is arguably necessary in order to build quantitative scenarios by exploiting existing quantitative statistics and surveys, as well as, somewhat qualitative expert opinions on future technologies, consumer media usage behavior and world development in general (Obersteiner & Nilsson 2000). Therefore we present a bottom-up foresight process, drawing on the process describe in Oberstein & Nilsson 2000, to produce baseline scenarios capturing population dynamics, continuous product evolution and continuous changes in media product usage by cohorts.

Secondly, we discuss on a method in order to i) identify eligible product characteristics ii) innovate new media products iii) assess the innovated products in view of identified characteristics and iv) create a framework where innovated products can be evaluated from different perspectives by emphasizing the product characteristics.

Thirdly, we discuss on an exploratory scenario approach that suits especially well to foresight in developing countries. While the future of consumer behaviour is quite unpredictable there in general, also the non-western-like aspects of governmental

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regulation (especially in China), societal conditions and for example low literacy rates make scenario tools quite useful. In this chapter, the usage of scenarios is considered with the help of illustrative examples, such as the deregulation in China. A scenario that could affect also the western market is for example a dramatic tightening of taxation by environmental grounds.

Fourthly, we consider more "lessons learned"-like approach: The enormous economies of India and China are growing fast and the total paper consumption estimates for China to year 2010 vary from staying stable in 43,0 million tons (2003) to raising up to 60 million tons or more. When seeking growth in Asia, a paper company should take into account the consumer behaviour development in these countries. The aim of this case study is to offer tools for analysing some of the threats of this development and also find ways to affect it beforehand. A project named One Laptop per Child (OLPC) aims to offer a 100 million laptops for educational use to children of the developing countries. This project is a good example of how one could affect peoples consuming behaviour in global scale. The contents of the study consist of threat analysis of using digital media in education, analysing the OLPC (Why it is successful? etc) and finally, learning from the project and considering how a paper company could run a similar project in order to increase the educational use of paper products in poorer countries. In the conclusion part some alternative approaches to the subject of increasing the paper usage in education in the developing world are considered.

3.   Towards the final report

As we described earlier, there are two partly overlapping challenges that have emerged during the project. The risks related to the first challenge, defining what we are actually doing, have decreased as the project has proceeded and it is well-grounded to assume, that towards the end, we manage to keep the focus clear and controllable. Risks related to the second challenge, enormous amount of information, are still somewhat high and considering the schedule, the project group has to pay careful attention to the fact that we have only three weeks left.

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To sum up, we have quite a clear view of what we want to say, and moreover enough sources for explaining the statements. From now on, the project team will focus on writing the final report.

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