

The Media Industry as a Catalyst for Economic Growth

Ulf Lindqvist and Timo Siivonen

VTT Information Technology
PO Box 1204
FIN-02044 VTT
Finland
E-mail: ulf.lindqvist@vtt.fi, timo.siivonen@vtt.fi

1. Introduction

The rapid development in Information and Communication Technology (ICT) has enabled new media service forms, such as digital television, digital printing and cross media. On the other hand, it has also changed the value chain of the media industry and made the end product more modular. This, in turn, has enabled a decentralisation and outsourcing of the media processes.

However, different companies may choose different competition strategies even in the same market situation. While some media companies concentrate on their core business and outsource as much as possible of their media production, others see managing the whole value chain as an important part of their strategy.

The scope of this study was to analyse the structural changes in the media industry and allied branches, and to find the technology trends and business logics behind these changes. We also wanted to know whether the media sector could become an economic motor for other branches, e.g. by creating new Knowledge Intensive Business Services (KIBS).

The project was carried out in close co-operation with eight Finnish companies representing both the media industry (printed and electronic media) and related branches, such as the forest industry, teleoperators and system suppliers. Although the approach angle was national, the value chain and the structural changes in the media business are today similar in most countries. The media branch is rapidly globalised. Therefore, most trends analysed here should be of interest also to an international audience of media experts.

2. Research methods

In the first step theories about the dynamics of branch structures were studied. Rather much literature were found. Executives from the eight companies were interviewed to find out the value chain of the media industry in respect to customers, products and services, types of contents, formats, markets, competition and strategies. The need for outsourcing of media processes and the corresponding needs for new business services were estimated.

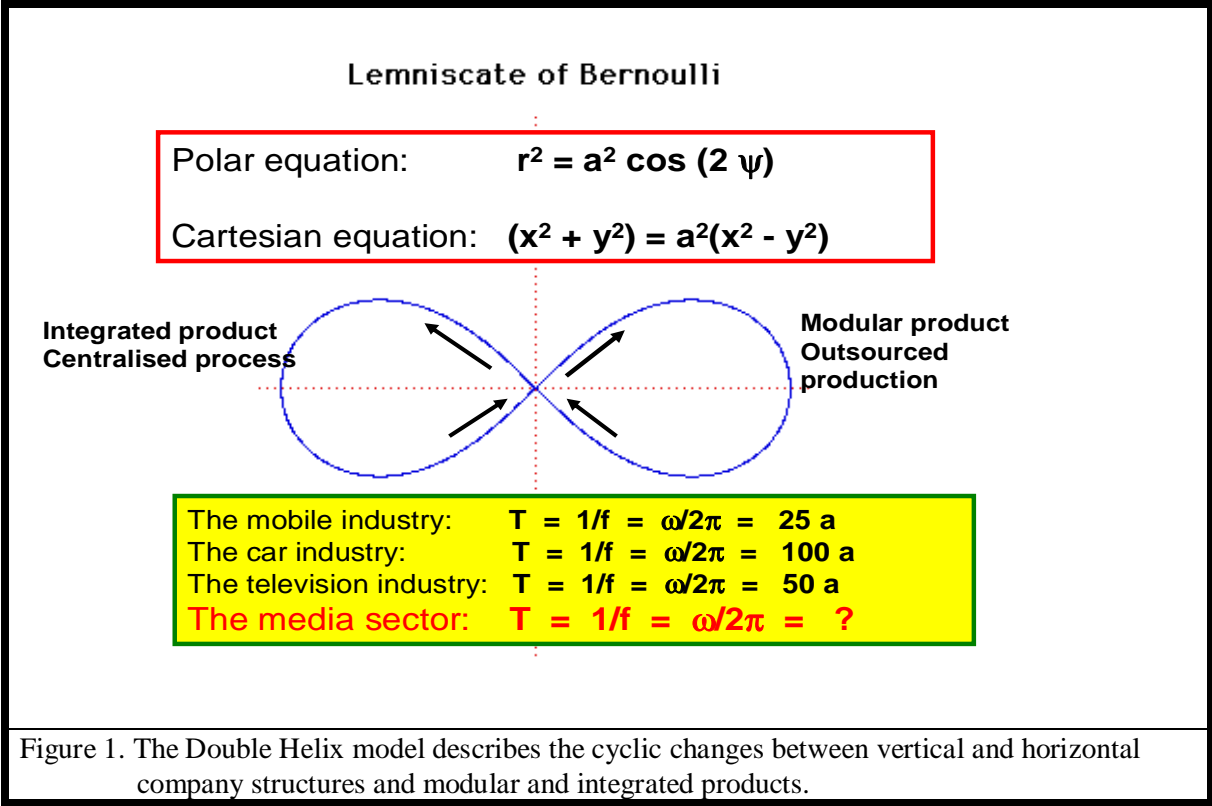
During the project the Steering Committee visited research organisations and companies at the east coast of the USA. American experts shared their views about the future of the media sector. Together with the experts of the participating industrial partners the future of the media industry was analysed towards the year 2015. A Delphoi study was performed with the aim to estimate the expected time frames for the technical development and the volumes of different media. The megatrends in the media field were defined, and weak signals indicating hypes and break-throughs were searched for.

Finally, the media future was also studied in four different scenarios: 1) A future without surprises with the discovered trends continuing, 2) A future with strongly and rapidly expanding digital media, 3) A careful and cautious development in the media sector like in the Polonaise dance: two steps front and one step back, and 4) A horror scenario, where the Tsunami waves of the ICT society destroy the media future. The scenarios are described in the Appendix.

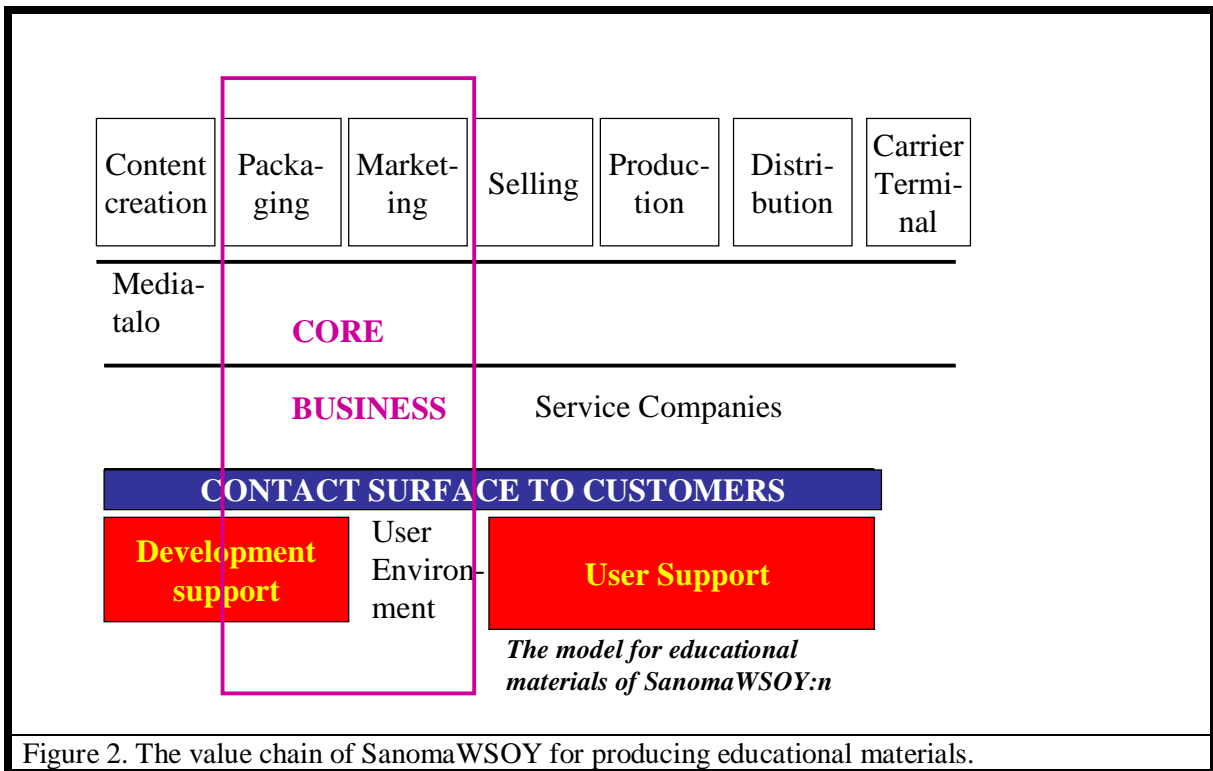
3. Results and discussion

The organisation structure of companies in different branches may vary cyclically between vertical and horizontal, as the products vary from modular to integrated (Fine, 2001). The dynamics is often described by a Double Helix model, or by the Lemniscate of Bernoulli – see figure 1. The driving force for the restructuring is the need to concentrate on core business by outsourcing, and the need to strategig strength via integration, respectively.

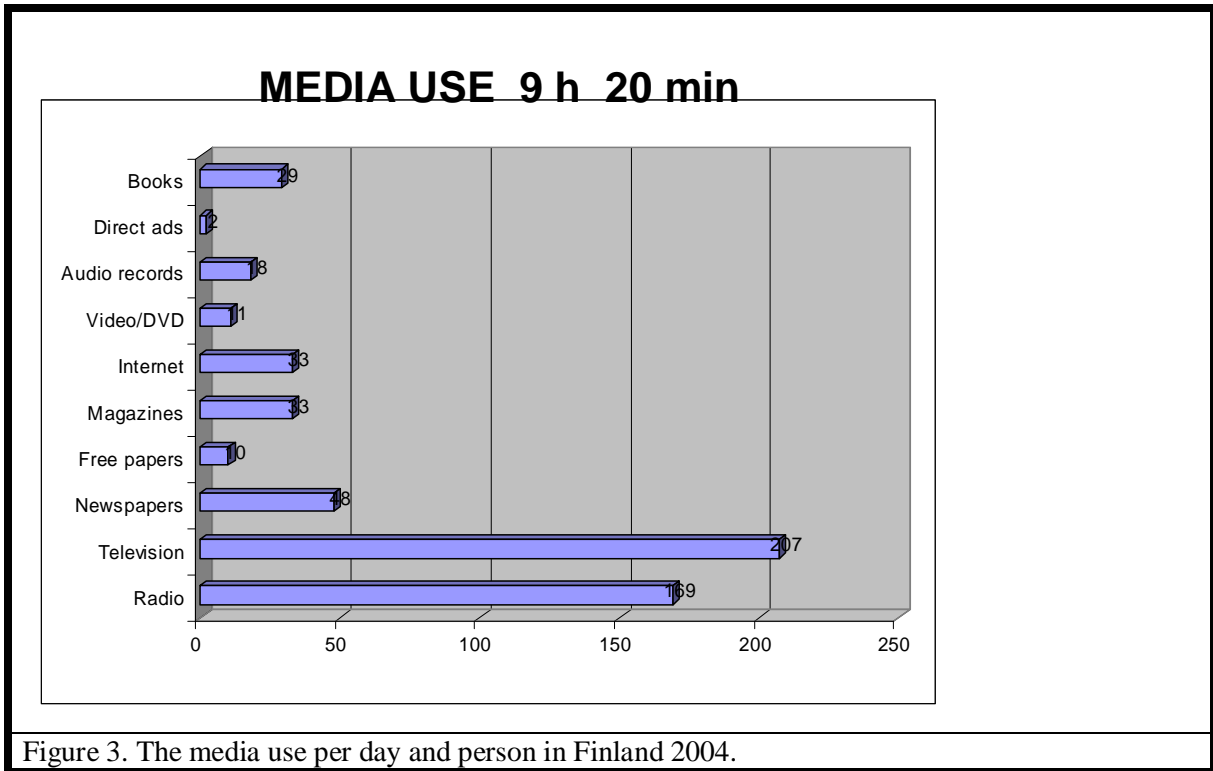
This phenomenon applies also to the media industry. However, different media companies may be in totally different parts of the organisation cycle dependent on the paradigm chosen and their degree of development. Each company must define its optimum position in this respect, and no general figures for the whole branch can be given (Lindqvist et al., 2005). Figure 2 shows the defined value chain and the core business for a company producing education materials. In Europe electronic media companies are usually horizontal in structure, whereas American are vertical (Soramäki, 2004).



Internationalisation has started in the Finnish media industry, but much slower than in other branches, like the forest industry, electronics and telecommunications. Big media companies are still mostly in national possession, and the share of export and activities abroad are mostly below one third of the turnover, though increasing (Jeskanen-Sundström et al, 2004). About 15 per cent of the media sector is in international possession and the share is expected to double in ten years.



The time spent on media has increased only marginally during the last years, and is now 9 h 20 min per day – see Figure 3 (Raulos, 2004).



Overlapping use of media has increased and user frequency varies strongly with the time of the day, from working day to weekend, and from season to season (Sabelström-Möller, 2004). Figure 4 shows the overlapping media use in Finland in 2004 (Heinonen, 2004).

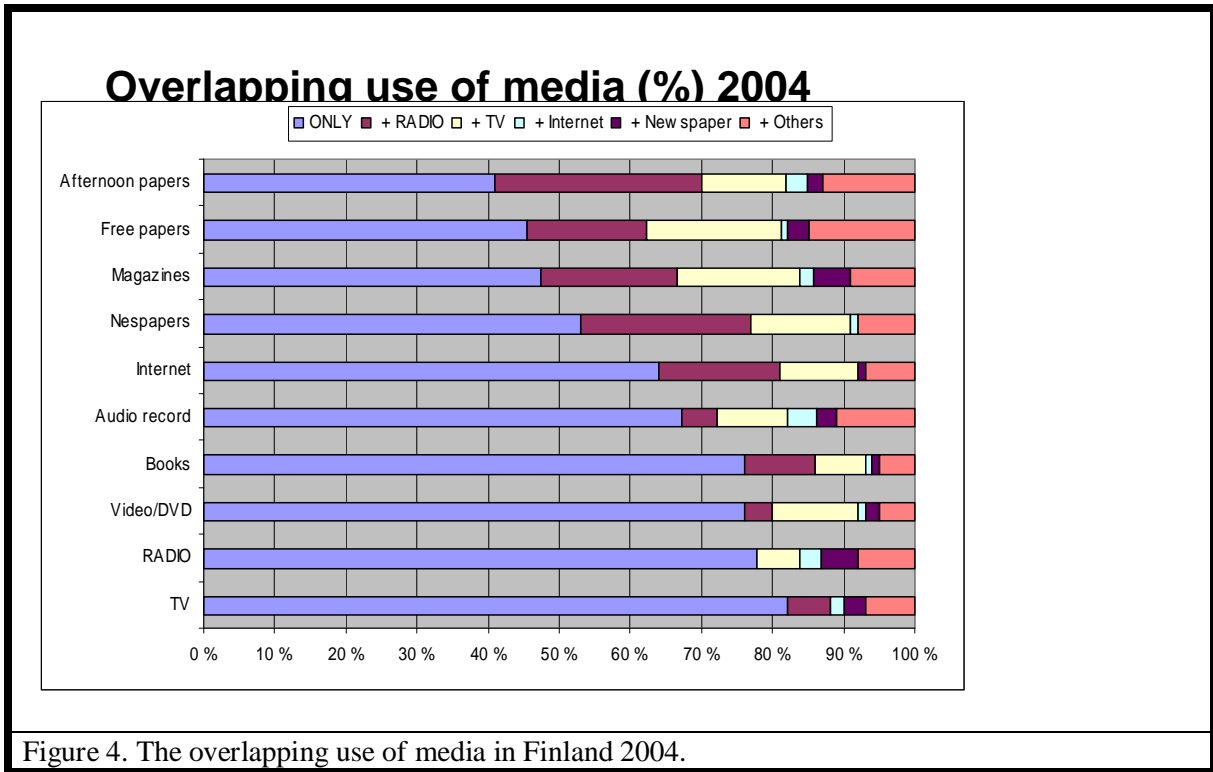


Figure 4. The overlapping use of media in Finland 2004.

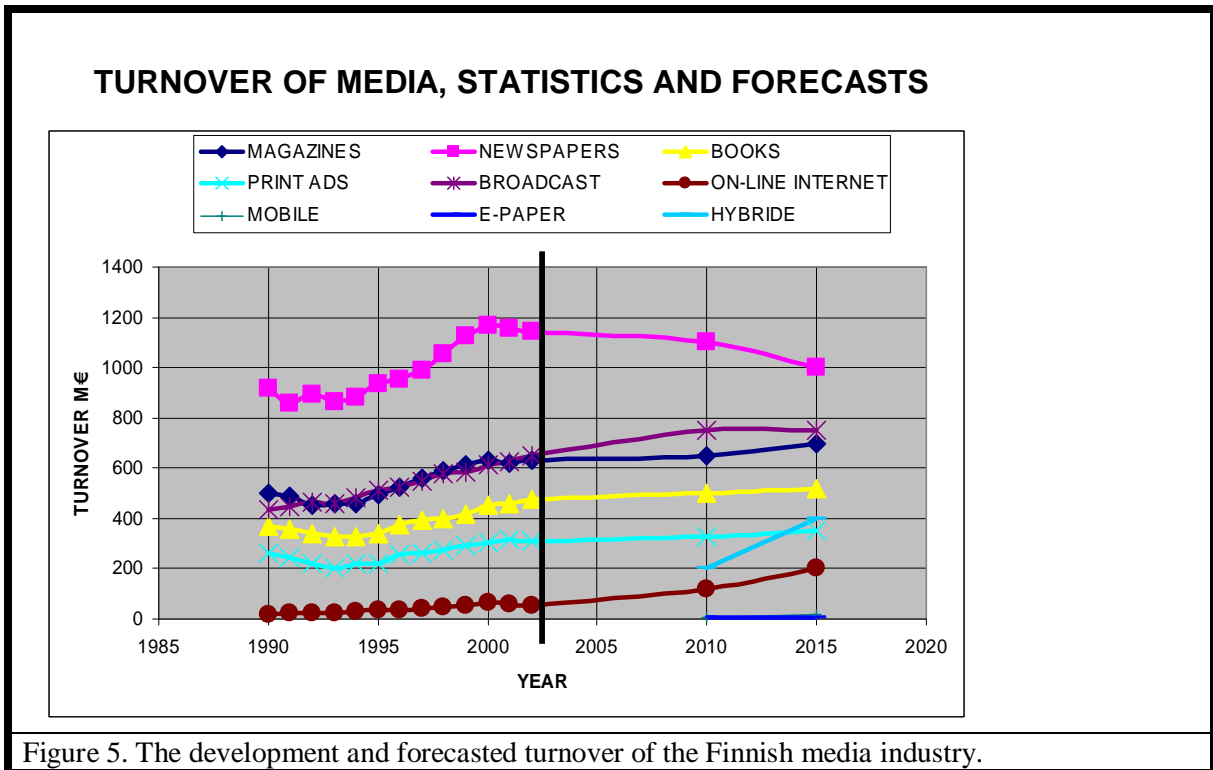


Figure 5. The development and forecasted turnover of the Finnish media industry.

Although an increase occurs in the turnover of most media after the depression in the early Nineteenth (see figure 5), the relative share of the BNP covered by the media has been declining. This is due to a rapid growth in other sectors, especially in ICT. The forecasts for the future development are based on a Delphoi study. Targeted media is increasing, obviously on the costs of traditional mass media. Many suppliers to the media industry, like independent television programme producers and commercial television channels, have been in trouble since the early 2000, and the printers suffer from over-capacity (Jeskanen-Sundström et al, 2004). The media sector is also very sensitive to economic fluctuations because of its dependence on advertisements. Advertising is known to react extremely strongly on fluctuations.

Three of the four scenarios were analysed quantitatively (Figure &.) In all the scenarios the expected growth in turnover of the Finnish media industry until the year 2015 remains modest, from 3,7 to 4 or 4,5 B€ However, the positions of the different media strongly vary between the scenarios. In the future without surprises the turnover of electronic media rises to 30 per cent of the total media turnover, whereas in the rapid growth scenario it reaches 3 B€and overhauls by far the volume printed media.

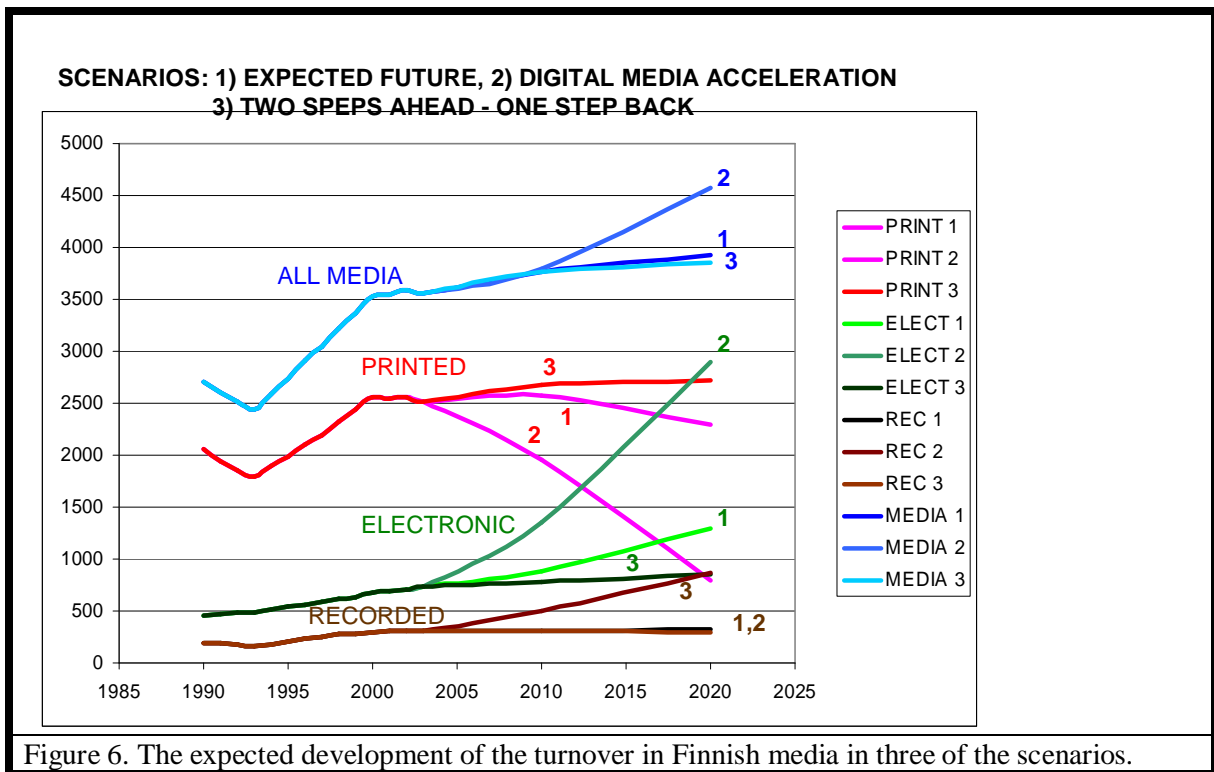


Figure 6. The expected development of the turnover in Finnish media in three of the scenarios.

The study offers some general strategic hints to the media sector. First of all, each company should choose its paradigm for process modularity and company structure, depending on to what an extent the company wants to keep the whole value chain “inside” or just concentrate on its core business. This is not a “once and for ever” decision, since markets and environment change continuously. Most changes are cyclic, but the amplitude and frequency of the cycles vary.

The company also needs to decide about its globalisation strategy. The media content is almost always national, or even local, even if the format may be global. Even national contents from small countries may succeed on global market, e.g. in the movie, music and game business.

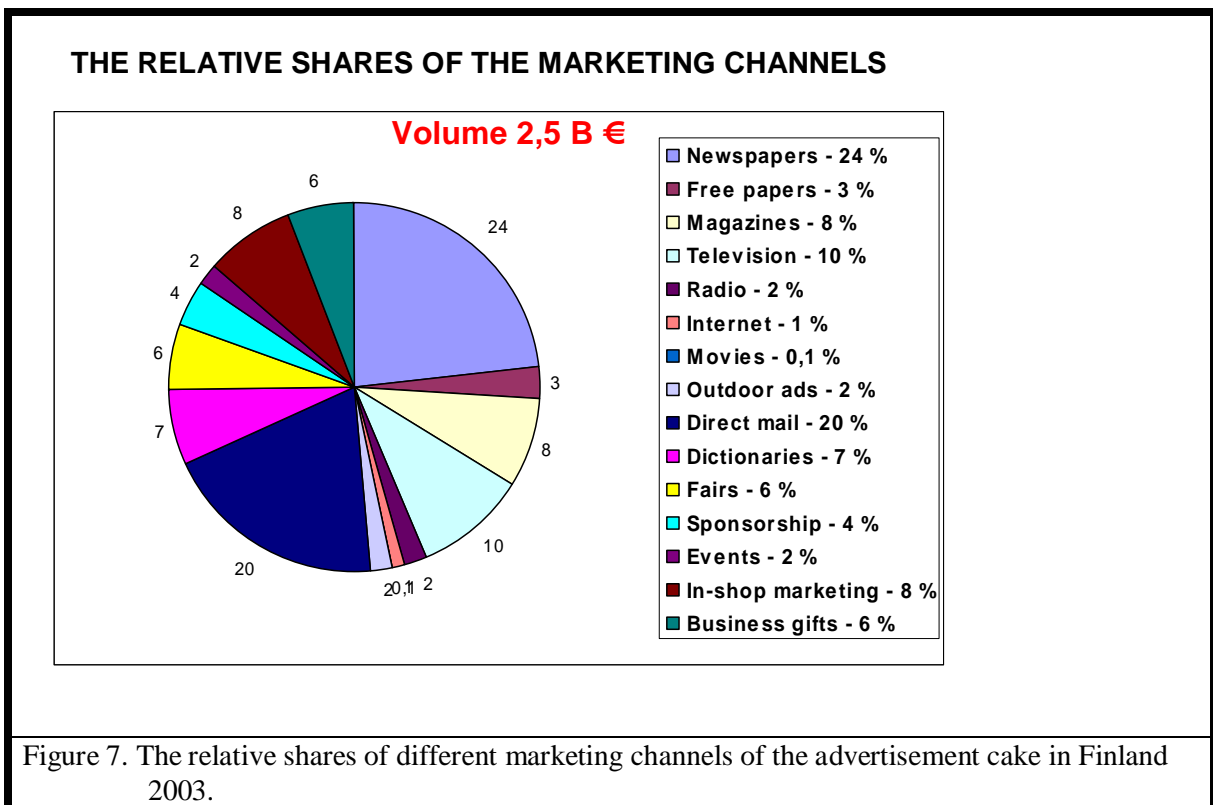
The media industry also has the ability to create and utilise knowledge based service companies in their production and product development. Such services may be customer service management, treatment of ads, tailored newspapers, distribution and new hybrid media services. In new innovative media services the interaction between content and technology must be fully understood so, that the media company can offer the optimum combination of content and information carrier to the needs of the customer.

4. Conclusions

The media sector can hardly develop to become a new motor for the Finnish economy, if we consider a “motor” to be an economic miracle comparable to Nokia in the Nineteenth. On the other hand, the branch can act as a strong catalyst for many others supporting their technical and economic growth. Such branches are the new “hybrid media”, e-Business, advertising, entertainment and games, forest, manufacturing, equipment, telecommunication, electronics and the software sectors. This catalytic effect is decades above the turnover of the media branch itself.

Hybrid media is an attempt to integrate ambient environments into printed products. Using printing technology it is possible to create electronic components, intelligent media and packages. Also e-Business is an increasing area, where the role of the media industry could be of utmost importance. The media sector forms a natural link between the producers of goods and services, and the end consumers.

Another important branch, where the media industry can have a strong catalytic effect is advertisement – see Figure 7. The appearance of new channels and media on the market may at a first glance disrupt media ads and lower their efficiency. On the other hand, they offer opportunities to target the ads to clearly specified groups. The suction of the media can be utilised also to build a cultural industrial ground, where culture can be exploited commercially. The amusement industry, sport entertainment and the increasing game industry are examples of this application.



Nevertheless, the most important catalytic role of the media sector will remain towards the electric and electronic industries, software and telecommunication industries and, last not least, the traditional forest industry in connection with machinery and equipment manufacturers.

The catalytic effect of the media industry has been roughly estimated quantitatively. The total turnover of Finnish companies in the above mentioned branches close to the media sector is today almost 80 B€ and their potential growth until 2015 is even 100 per cent. Even if the share catalysed by the media industry on the growth in these branches on national and international markets is difficult to estimate exactly, it is clear that the economic impact is by no means marginal.

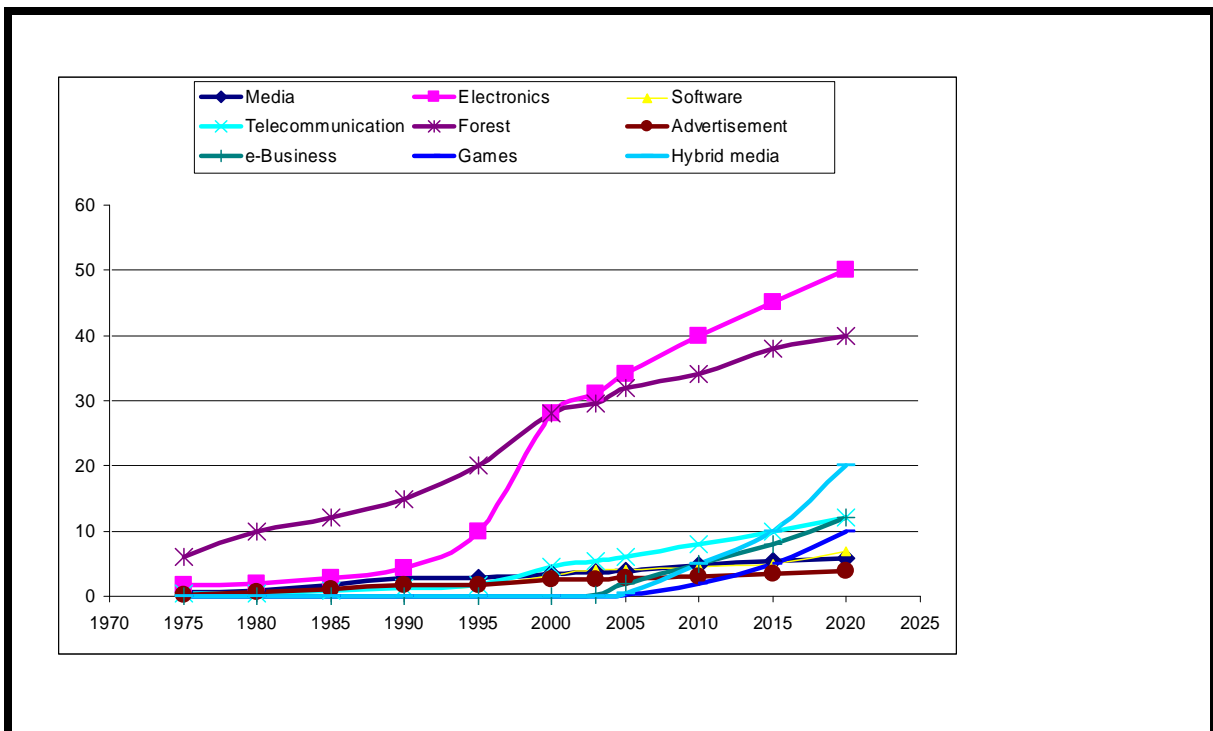


Figure 8. The development in turnover of the most important branches catalysed by the media industry in a historic perspective and their expected future.

The research work reported here still leaves new challenges for further research. Such challenges are to build development models for the media sector, to establish a hybrid media network in the boarder area between the forest industry and the ICT cluster and to develop new media services especially for aging population.

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6. Literature references

1. Davis, M., Walter, M., (2004), NEXT-wave Publishing Technology, Part 2: Revolution in Process. The Seybold Report.
2. Fine, Ch., (2001), Mapping the telecom value chain: A roadmap for communications networks. MIT Sloan School of Management, Cambridge, Massachusetts.
3. Heinonen, O.-P., (2004), Viestintäteollisuuden haasteet. VTT Tietotekniikan asiakasseminaari, Espoo. (In Finnish).
4. Howkins, J., (2001), The Creative Economy: How People Make Money. Penguin Books 2001.
5. Jeskanen-Sundström, H., Melkas, J., (2004), Statistical yearbook of Finland, Statistics Finland, Helsinki. 704 p.
6. Juhola, H., Lindqvist, U., Siivonen, T., (2003), Media Technology Outlook. VTT Information Technology, Research Report TTE4-2002-27. Espoo.
7. Koulouvari, P., (2004), Family-Owned Media Companies in the Nordic Countries. Media Management and Transformation Centre. Jönköping international Business School. Jönköping. 46 s.
8. Laine, S., (2004), Päättäjien mediatutkimus 2004. TNS Gallup Oy, Helsinki. (In Finnish).
9. Lindqvist, U., Siivonen, T., (2002), Integration and convergence in the media field. 29th IARIGAI Conference, Lake of Lucerne, Switzerland. 22 p.
10. Lindqvist, U., Siivonen, T., Juhola, H., (2005), Mediateollisuus Suomen uudeksi veturiksi, VTT Information Technology, Research Papers TTE4-2004-18, Espoo, 86 p. (In Finnish) URL: www.vtt.fi/tte/proj/mediaveturi_loppuraportti.pdf
11. Murtha, T.P., Lenway, S.A., Hart, J.A., (2001), Managing New Industry Creation: Global Knowledge Formation and Entrepreneurship in High Technology. Stanford University Press, Stanford.
12. Raulos, M., (2004), Intermediatutkimus, TNS Gallup Oy, Helsinki.
13. Sabelström-Möller, K., (2004), Dayparting – Vem läser vad och när på nätet. Nordiska Marknadsdagar, Tampere. (In Swedish).
14. Soramäki, M., (2004), Informaatioyhteiskunnan teorian, politiikka ja sähköisen viestinnän todellisuus; Eurooppalainen näkökulma. University of Tampere. (In Finnish).
15. The Nordic Media Market 2003. Nordicom. Göteborg. 166 s.

7. Appendix

The alternative four scenarios are:

A future without surprises with the discovered trends continuing

- A slow increase in GDP with economic fluctuations
- Entrepreneurship is strongly supported by national governments
- The further development of the Information Society is enhanced and supported
- New economic motors for the economy are searched for; no real break-through
- The “China Phenomenon” transfers the production and employments to the Far East
- Also South-America is an area for investments, but on a smaller scale
- The Baltic countries and Russia become a reserve for (cheap) labour
- Competition is increased by anti-trust legislation, deregulation and breaking monopolies. (The discussion on breaking national monopolies for alcohol, broadcasting etc. will continue.)
- The welfare society remains, but most services are outsourced. Services are effectuated, prioritised and the individual risks are increased
- Immigrants from East and South solve the labour shortage especially in the welfare sector
- EU develops toward a federal state, the member states become more dependent on EU but EU also on the rest of the world
- Mobile devices in every pocket and broadband to every little cottage
- A symbiosis between big media companies and small production plants
- The content industry remains national although multinational companies eat the mass markets.

A future with strongly and rapidly expanding digital media

- The growth in GDP is modest but contains strong and rapid cycles
- The technology bubble bursted, but the hype returned in damped form
- “The new economy” requires fast growth and market shares; leads to concentration and profitable units
- International ownership – So what? Everything is for sale
- The adventurers are heroes and the real motors of the economy
- Those who succeed are rewarded generously but those who fail are not banned
- The head office of Nokia went to US, but some R&D still remained in Finland
- The final countdown started for print media, passive euthanasia started
- A market driven content industry leads to a quantitative overflow
- Common people are offered cheap entertainment, quality journalism is for the elite
- The youngsters keep all channels on all the time

A careful and cautious development in the media sector like in the Polonaise dance: two steps front and one step back

- The economy is almost in stagnation, welfare services must be cut
- The return of search for security
- The Nordic “People’s Home” requires high taxes, but there are less active tax payers
- Solutions to problems are still searched for in ICT, but only partly found
- Nationality and independent states are important values in EU
- Environmental aspects and honesty become important values
- Immigration is restricted
- Foreign investments are considered odd

- The descent of print media stopped
- Hybrid media is the new hype
- Small states face problems in adapting themselves to the changes in the world economy
- The “China Phenomenon” really beats

A horror scenario, where the Tsunami waves of the ICT society destroy the media future.

- EU breaks down or some member states leave the Union
- The democratic development in Russia stops
- The cheap labour countries and their tax policy finally break the western welfare states
- Nokia was taken over by Microsoft
- The increased economic inequality leads to social conflicts and criminality
- The Orwell Society: increased control and limited freedom for citizens
- The media power is monopolised or the governments interfere with press freedom via censorship
- Multimodal communication systems for the elite, Imposing mass entertainment for the majority, Losers are left off-side
- Open conflicts between the western world and the Islamic world
- Energy crises, prices reach heaven
- Standard of living drops dramatically in the western world
- Mass unemployment, social conflicts, strikes and lock-outs
- Threats for terrorism everywhere; citizens’ rights are limited