

Assessing Copyright and Related Rights Systems

Development of Digital Business Models and Income Based on Digital Distribution

Report on Piloting in Finland





Assessing Copyright and Related Rights Systems: Development of Digital Business Models and Income Based on Digital Distribution. Report on Piloting in Finland.

This report is the result of the first pilot study implementing Methodology Card 4 – *Development of Digital Business Models and Income Based on Digital Distribution*, one of the 37 indicators constituting a methodology framework for assessing the operation of national copyright and related rights systems. The methodology framework has been developed at the Foundation for cultural policy research (Cupore) in Finland as part of a project financed by the Finnish Ministry of Education and Culture. The first section of the pilot study (The Market Share of Digital Sales in Core Copyright Industries) was conducted by the core project team, Tiina Kautio and Nathalie Lefever, and by Milla Määttä, Intern at the Ministry of Education and Culture, between April and July 2013. The second section (Companies in Software Industry Utilizing Open Licensing) is based on a pilot study conducted by Mikko Karaiste, PhD student at the University of Jyväskylä, between November 2010 and July 2011, as a first piloting test conducted at an early stage in the development of the methodology. The results were first published in October 2014 on the website of Cupore.

A handbook presenting the methodology framework is available on the website of Cupore at www.cupore.fi.

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Executive summary

This document presents data collected in application of a methodology framework to assess the operation of copyright and related rights systems. More precisely, the information and analysis below correspond to Methodology Card 4 presented in the methodology handbook, titled “Development of digital business models and income based on digital distribution”. The goal of this report is to provide an overview of the development of digital markets for copyrighted works in Finland.

The report is divided into two sections. Section 1 provides an overview of the magnitude of digital sales as a proportion of all sales in certain copyright-based industries. The study focuses on press and literature, music industry, software industry, audiovisual industry, and game industry. The review is based on data provided by industry organizations or associations, as well as other actors such as Statistics Finland and, although limited in its scope, could be used as basis for more comprehensive future studies.

Concerning the press and literature industries, the share of web services in the sales of Finnish literature in 2010 was 2 %, and the market share of digital sales for members of the Finnish Book Publishers Association increased from 2.6 % (in 2007) to 5.7 % (in 2012) of all sales. An estimation concerning the share of web services in the revenue of newspapers and magazines dating from 2010 amounted to 5.3 %. In the music industry, sales figures concerning IFPI Finland members (representing about 95 % of the total Finnish music market) indicate that the market share of digital sales concerning Finnish music recordings has evolved from 4.6 % in 2007 to 27.4 % in 2012. A survey concerning the software industry and published annually by Aalto University School of Science estimates the share of the two main types of digital distribution of softwares, ASP and SaaS, at a percentage varying between 11 and 14 during the period of 2007-2011. Finally, no information was found online concerning the proportion of revenue based on digital distribution in the audiovisual and game industries.

Section 2 presents results of a survey on open source business activities conducted in 2011 among COSS (The Finnish Centre for Open Source Solutions) member companies. The topics studied were the significance of open source business activities in terms of turnover and employment and on the different open source business models adopted by the companies studied. The results showed that there is open source business activity both small and large scale in terms of turnover and employment. Among the companies studied, two of the most common open source business models were based on services. Other business models used were oriented to software development also offering services associated with open source software. The results also revealed the industries in which the companies using open source business models operate.

At the time of conducting the study, no statistical data concerning business activities utilizing open licensing was publicly available. No industry classification or publicly available company databases were found to facilitate the study of open licensing business activity in Finland. However a definition of open source business activity was drafted during the piloting.

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Introduction

A. CONTEXT OF THE PILOT STUDY

A methodology framework for assessing the operation of national copyright and related rights systems has been developed at the Foundation for cultural policy research (Cupore) in Finland. It is a collection of tools for achieving a systematic assessment of the functioning, performance and balanced operation of national copyright and related rights systems.

In the methodology, the assessment of the copyright and related rights system is determined through a framework consisting of so-called description sheets and methodology cards. The description sheets constitute guidelines to produce a comprehensive presentation and description of a country's copyright and related rights system and its operating environment. The methodology cards propose the collection of specific sets of data, either quantitative, descriptive or qualitative, that will be used as indicators of the functioning, performance and balanced operation of the system. Description sheets and methodology cards are accompanied by detailed information on the data to be collected, as well as analysis guidelines that will help connect them to each other.

The methodology framework is envisaged to be continuously improved through application feedbacks. For more information, see the Cupore website, www.cupore.fi/copyright.php.

This report presents data collected in application of Methodology card 4 of the methodology framework, titled "Development of digital business models and income based on digital distribution". It is the result of the first pilot study applying this indicator in Finland.

The first section of this report (The Market Share of Digital Sales in Core Copyright Industries) is based on conducted by the core project team, Tiina Kautio and Nathalie Lefever, and by Milla Määttä, Intern at the Ministry of Education and Culture, between April and July 2013. The second section (Companies in Software Industry Utilizing Open Licensing) is based on a pilot study conducted by Mikko Karaiste, PhD student at the University of Jyväskylä, between November 2010 and July 2011, as a first piloting test conducted at an early stage in the development of the methodology¹.

B. PRESENTATION OF THE INDICATOR

The indicator implemented here is intended to present the national context of the copyright system from the angle of markets based on digital business models or digital distribution. It is part of the first pillar of the methodology framework, "Copyright environment", and its second area, "Value creation processes and the markets for copyrighted products and services". It is an indicator which provides information on the importance of digital distribution and the different business models in the markets for copyrighted goods and services, in order to support the analysis of the operation of the national copyright and related rights system.

The purpose is to evaluate how the existing markets have adapted to the opportunities and challenges brought forward by the development of Internet and Communication Technology (ICT). The indicator focuses on the new business models, the extent of their use, and their ability to generate income flows.

¹ The piloted indicator was initially developed by the project group during 2010. In the initial phase Professor Jukka Heikkinen (University of Jyväskylä) contributed to the formulation of the indicator. As of September 2010 Mikko Karaiste joined the core project team as a researcher and focused on the formulation of the indicator in collaboration with other members of the team.

As explained in the methodology handbook, the development of ICT has represented opportunities for user-generated content and digital distribution. User-generated content is commonly licensed under open license. Open licenses enable content creation in communities without the restrictions of proprietary rights. On the other hand, companies can create new business models based on open licensed content, such as content provided by user communities. User-generated open licensed content ranges from Wikipedia to Linux distributions, but for the purposes of this methodology, software industries have been considered as a defined representative industry for the assessment. The essential difference between open licensing and other digital business models is in the ownership of works. Open licensing aims to avoid the possible restrictions copyright regulation may generate to free access and to the possibility to modify the works. However, while open licensing is used to govern user-generated content, copyright protects the moral rights of the authors and prevents infringements of open licenses.²

This indicator focuses on business models based on digital distribution, and open licensing. The first parameter concerns the share of digital sales of all sales in different core copyright industries. The data collected with the second parameter concentrates on the prevalence of digital business models in terms of the number of companies using them and their turnover³, with a specific focus on the business models based on open licensing. The research concerning the second parameter is limited to the software industry only.

The information can be compared to the popularity of other business models considered traditional. The adoption of new business models and orientation to digital distribution by existing and new companies affect the dynamics of the markets. It can also affect piracy if the companies succeed in providing attractive services to customers. The data will be partially influenced by the existence of legal provisions concerning the use of new technologies in copyrighted works, information captured in Description sheet 1. The existence of organizations supporting or promoting the utilization of digital business models is described in Description sheet 3.

Discovering new ways of doing business obviously has an economic impact but also cultural and social impacts as it adds to the availability of culture. For an understanding of these effects, it is important to recognize the different kinds of business models and the different forms of open licensed user-generated production.

A methodology card presenting the indicator can be found in Appendix A of this report.

C. METHODS

The information collected for parameter 1 of this indicator (“The Market Share of Digital Sales in Core Copyright Industries”) was based on data provided by industry organizations or associations, as well as other actors such as Statistics Finland. The method chosen was therefore desktop studies. The information was collected separately for each industry. The study is an overview which provides information for the basis of more comprehensive future studies.

Piloting the Parameter 2 of the indicator (“Companies in Software Industry Utilizing Open Licensing”) included the following phases: (1) desktop research for mapping possible sources of information (November and December 2010), (2) establishing contacts for collecting the data (December 2010), (3)

² Digital business models that are based on owning the rights lean heavily on copyright protection, whereas the businesses basing their operations on open licenses often avoid it. Works under the regimes of public domain and open license enable modification of the works (depending on the extent of the license), while the term open access means only the possibility to access the works or content.

³ The business activity utilizing open licensed works will be referred to as open source business activity in the context of this report.

developing and executing the survey (December 2010 and February 2011), and (4) reporting the process and the results (May and July 2011).

- (1) Desktop research: Possible information sources for the parameters were identified using the Internet and their suitability for the parameters of the indicator was evaluated⁴. All of the information sources researched in piloting shared the same difficulty: information about companies was available, but, excluding TEKES' ASTA, none of the databases had classification for industry utilizing open licensing. Without a list of companies utilizing open licensing as their main business activity, the data from the databases could not be used for gathering data described in the methodology.
- (2) Establishing contacts: The next phase was to contact the Finnish Centre for Open Source Solutions (COSS, <http://www.coss.fi>)⁵. COSS is a national development agency for open source ecosystem in Finland. They promote the development and adoption of open source solutions in various industries and in the public sector. COSS' members represent more than 140 open source vendors, solution providers and public and private organizations utilizing open source solutions and innovation models.

⁴The following information sources were evaluated:

Amadeus (<http://www.bvdinfo.com/Products/Company-Information/International/Amadeus>) is an international database of comparable financial information for public and private companies across Europe. It offers information on over 15 million companies across Europe. It is available for researching individual companies and companies with specific profiles for analysis. Amadeus contains, amongst other things, company financials, financial indicators, corporate structures and market research. Amadeus charges for rendering services on searches and analysis. Amadeus does not offer classification for industry utilizing open licensing.

TEKES (<http://www.tekes.fi>) is the Finnish Funding Agency for Technology and Innovation. TEKES is a publicly funded expert organization with a purpose to finance research, development and innovation in Finland. TEKES is funded by the Finnish state via the Ministry of Trade and Industry with a budget of 500 million euros used for funding more than 2,000 projects annually. Funding opportunities are directed at technological innovations as well as service-related, design, business and social innovations. TEKES has a database of its company clients which covers 20 000 companies. The system is updated once per year considering circa 4000 companies. TEKES also has a company database, ASTA, for companies offering their services linked to open source software. ASTA covers attributes such as companies' turnover, profit, export, R&D investments, and number of employees, capital, end balance, net revenue per capita, and value added per capita, but is limited in access. TEKES and ASTA do not offer classification for industry utilizing open licensing.

Statistics Finland (<http://www.stat.fi>) is public authority producing the majority of Finnish official statistics and providing information services for the needs of society. Statistics Finland offers industrial classification and sub classifications on most common industries in Finland. However, Statistics Finland does not offer a specific classification of companies utilizing open licensing.

The Business Information System (BIS) (<http://www.ytj.fi>) is an information service jointly maintained by the National Board of Patents and Registration of Finland and the Finnish Tax Administration. The BIS includes information on businesses and organizations entered for instance in the Trade Register, Register of Foundations, VAT register and the Client Register of the Tax Administration. All businesses and organizations that are included in the BIS are given a Business Identity Code (Business ID). The free information service of the Business Information System is meant for checking information concerning individual businesses and can be searched with keywords, business ID and company form. The BIS also offers services liable to charge, which include searches for companies in the BIS database, groups within regions, classified with Statistics Finland's Standard Industrial Classification, company form, register (the registers of the Tax Administration, the Trade Register and the Register of Foundations) or according to registration date. BIS does not offer classification for industry utilizing open licensing.

The Finnish Trade Register (<http://www.prh.fi/fi/kaupparekisteri.html>) is a public registry under the National Board of Patents and Registration of Finland (<http://www.prh.fi>) containing information on businesses. Finnish businesses are obligated to register at the Trade Register and to notify the register of any changes in their registered details. The Finnish Trade Register offers a company search, which is directed to a chargeable search engine Virre (<http://virre.prh.fi>) (Information Service for official register information about businesses, foundations and enterprise mortgages). Virre offers search options on companies, foundations, enterprise mortgages, persons, names and financial statements. The Finnish Trade Register does not offer classification for industry utilizing open licensing.

Finder (<http://www.finder.fi>) is a publicly available commercial service for searching the addresses of individuals and companies, phone numbers, maps and routes, and extensive search of information on companies. The searches are categorized by keywords, name of the company, branch of industry, amount of employees, and region. Finder does not offer classification for industry utilizing open licensing.

⁵ Thanks to a suggestion by Manu Setälä from Tekes.

COSS member list offered a possible solution for acquiring information stated in the parameters of the indicator. Cover letters were sent to Ilkka Lehtinen (Executive Director of COSS, strategy and partnerships, public sector) and Matti Saastamoinen (training services, business development, licensing, COSS). Lehtinen volunteered to send the survey to the member companies provided that COSS would get the results of the survey. He stated, however, that a survey directed at COSS member companies would not represent all companies utilizing open licensing in Finland.

- (3) Developing and executing the survey: The survey for COSS member companies was first drafted by Mikko Karaiste according to the parameters of the indicator, commented and approved by Tiina Kautio, Anita Kangas (Professor of Cultural Policy at University of Jyväskylä), Ritva Mitchell (Research Director at CUPORE) and Ilkka Lehtinen. After its formulation, the survey was put online as a Google Docs survey. Ilkka Lehtinen sent the survey on 14th of January 2011 to COSS member companies. A reminder of the survey was sent two weeks later. The questionnaire used for the survey is presented in Appendix E.
- (4) Reporting: A pilot report on the study based on Parameter 2 was first completed in May 2011. The results presented in Section 2 of this report are based on this initial research. The results and findings concerning the implementation of the parameter were later used in the course of the development of the methodology and as a basis for preparing a new version of the methodology card presented in Appendix A.

Results

SECTION 1. THE MARKET SHARE OF DIGITAL SALES IN CORE COPYRIGHT INDUSTRIES

The purpose of this methodology card in its first part is to provide an overview of the development in the market shares of digital sales as a percentage of all sales in different copyright-based industries. The focus of this pilot study was on certain industries only. The following industries have been studied separately:

- A. Press and literature,
- B. Music industry,
- C. Software industry,
- D. Audiovisual industry, and
- E. Game industry

Various figures on the total sales of different industries were available: *turnover* or *revenue* of companies in an industry, *market volume* of an industry and *sales at end-user* level in an industry. In addition, the figures available may concern either the wholesale or retail of goods, which is likely to make the definition of total sales even more complicated. These issues are discussed in more detail industry by industry.

A. PRESS AND LITERATURE

In order to get an overview of digital distribution of copyrighted goods in the press and literature industry in Finland, the study focuses separately on the sales of books on the one hand, and the sales of magazines and newspapers on the other hand.

▪ BOOK PUBLISHING INDUSTRY

Firstly, **Statistics Finland** has estimated the market volume of literature in their statistical release *Finnish Mass Media*.⁶ There are also updated tables of the turnover of electronic media on Statistics Finland's website.⁷ The book market volume presented in Table 1 describes the estimated industry sales at end-user level, and the figures include domestic production and imports. The only estimation of Statistics Finland on the share of web services in the book sector's revenue concerns the year 2010: according to Statistics Finland the estimated share of web services in Finnish literature at the time was 2 %.⁸

The **Finnish Book Publishers Association (FBPA)** also gathers information concerning the sales of the book industry.⁹ The association's figures are also presented in Table 1 below. Their statistics cover only

⁶ Statistics Finland: Culture and the Media. Finnish Mass Media 2011. Edita Prima Oy, Helsinki 2012. (http://www.stat.fi/tup/julkaisut/tiedostot/julkaisuluettelo/yklt_jvie_201100_2012_4884_net.pdf)

⁷ Official Statistics of Finland (OSF): Mass media statistics [e-publication]. ISSN=2323-6345. Helsinki: Statistics Finland [referred: 30.8.2013]. (http://www.stat.fi/til/jvie/index_en.html)

⁸ Statistics Finland: Culture and the Media. Finnish Mass Media 2011. Edita Prima Oy, Helsinki 2012, p. 143. (http://www.stat.fi/tup/julkaisut/tiedostot/julkaisuluettelo/yklt_jvie_201100_2012_4884_net.pdf). Mass media statistics 2012 were released on November 27th, 2013: Official Statistics of Finland (OSF): Mass media statistics [e-publication]. ISSN=2323-6345. 2012. Helsinki: Statistics Finland [referred: 12.2.2014]. Access method: http://www.tilastokeskus.fi/til/jvie/2012/jvie_2012_2013-11-27_tie_001_en.html.

⁹ Finnish Book Publishers Association: Facts and figures. Sales of Books in Finland. (<http://tilastointi.kustantajat.fi/PublicReporting/Yearly.aspx?language=ENG>)

the members of the association: in practice, the members account for ca. 80% of commercially published titles and over 90% of book sales in Finland.¹⁰ The market share of digital sales in literature has been estimated based on the data provided by the association. Still, there can be some overlapping in the presented figures, and it was left unclear which part of the sales covers wholesale and which part is retail. Regardless, these sales figures might give an idea of the importance of digital distribution of books in Finland: the value of digital sales of the members of the Finnish Book Publishers Association has increased during the past 5 years.

Table 1. Sales of books in Finland in 2007 – 2012							
Literature	2007	2008	2009	2010	2011	2012	Source
STATISTICS FINLAND							
Book market volume: estimated sales at end-user level. (€)	559 000 000	566 000 000	570 000 000	577 000 000	570 000 000	562 000 000	Finnish Mass Media: Mass media market volume in Finland, Statistics Finland. ¹¹
FINNISH BOOK PUBLISHERS ASSOCIATION							
Total sales (€): Finnish Book Publishers Association (FBPA).	281 998 600	291 002 000	268 266 000	274 686 000	275 909 000	262 955 000	Finnish Book Publishers Association. Sales of books in Finland. ¹²
Value of digital sales (€): FBPA.	7 296 700	7 263 000	8 400 000	9 346 200	13 322 800	15 009 500	Finnish Book Publishers association. Sales of books in Finland. ¹³
FBPA: market share of digital sales (% of all sales)	2.6	2.5	3.1	3.4	4.8	5.7	Proportion of digital sales of the members of the Finnish Book Publishers Association.

■ PRESS INDUSTRY

The estimated sales of the press industry at end-user level are presented in table 2; the press market is comprised of retail priced subscription and single copy sales, as well as the revenue from advertising – covering dailies, non-dailies, free papers, magazines and other periodicals, and not including directories

¹⁰ The Finnish Book Publishers Association. (<http://www.kustantajat.fi/en/association/>)

¹¹ Sales at end-user level. Only the values of 2010 to 2012 include digital sales. Starting from 2011, the sales of books from the publishers of newspapers and magazines are not included in the figures.

Figures until 2009 from Statistics Finland: Culture and the Media. Finnish Mass Media 2011. Edita Prima Oy, Helsinki 2012. (http://www.stat.fi/tup/julkaisut/tiedostot/julkaisuuttelo/yklt_jvie_201100_2012_4884_net.pdf). Figures from 2010 - 2012 from Statistics Finland's online mass media statistics: Official Statistics of Finland (OSF): Mass media statistics [e-publication]. ISSN=2323-6345. Mass media market 2011. Helsinki: Statistics Finland [referred: 30.8.2013]. (http://tilastokeskus.fi/til/jvie/2011/01/jvie_2011_01_2012-12-12_tie_001_en.html) and Official Statistics of Finland (OSF): Mass media statistics [e-publication]. ISSN=2323-6345. 2012. Helsinki: Statistics Finland [referred: 10.3.2014]. (http://www.tilastokeskus.fi/til/jvie/2012/jvie_2012_2013-11-27_tie_001_en.html).

¹² Total sales of literature types 2008–2012, without VAT. Printed books and Digital publications total. Finnish Book Publishers Association: Facts and figures. Sales of Books in Finland. (<http://tilastointi.kustantajat.fi/PublicReporting/Yearly.aspx?reportName=SalesHistoryGenresPrintAndDigital-C.xml&language=ENG>)

¹³ Yearly sales, digital publications; does not include recorded audiobooks. Finnish Book Publishers Association: Facts and figures. Sales of Books in Finland. (<http://tilastointi.kustantajat.fi/PublicReporting/Yearly.aspx?reportName=YearlySalesEurDigital.xml&language=ENG>)

and direct mail. Market volume includes both domestic production and imports. **Statistics Finland** has estimated the press market volume in their statistical release *Finnish Mass Media*.¹⁴

Contrary to the data available on the book industry, there are no estimates available concerning the yearly market volume of digital sales in the press industry. An estimation of the share of digital sales in the newspaper industry is available, but no estimations concerning the revenue from the circulation of magazines and periodicals in Finland in digital form could be found¹⁵. The following estimations will however provide some indication on the importance of digital sales in the Finnish press industry.

Firstly, in its publication *Finnish Mass Media 2011*, **Statistics Finland** has presented a single figure concerning the share of web services in the revenue of newspapers and magazines in 2010. At the time, the share of web services in revenue amounted to 100 million euros, or 5.3 % of all sales.¹⁶

Moreover, according to the **Finnish Newspapers Association**, the share of digital sales in the net sales of newspapers (circulation and advertising) in 2012 was just over 4 % (net sales were 1.081 billion). Revenue from digital circulation grew by 29 % compared to 2011 (whereas the revenue from digital advertising grew by 12 %).¹⁷ The share of digital sales (circulation + advertising) in 2011 was on average just under 4 % (net sales 1.124 billion). No estimations concerning previous years are available.¹⁸ However, these figures only represent the sales of the member companies of the Finnish Newspapers Association.¹⁹

Finally, according to PwC's *Global entertainment and media outlook*, the average digital revenue of newspapers in 50 countries (including Finland) was 5 % in 2012.²⁰

At the moment there is no alternative information concerning online sales on the websites of the **Federation of the Finnish Media Industry** and the **Finnish Periodical Publishers' Association**.

¹⁴ Statistics Finland: Culture and the Media. *Finnish Mass Media 2011*. Edita Prima Oy, Helsinki 2012. (http://www.stat.fi/tup/julkaisut/tiedostot/julkaisuluettelo/yklt_jvie_201100_2012_4884_net.pdf)

¹⁵ At the international level, the digital circulation revenue was estimated by PwC to account for 2 % of the magazine circulation revenue in 2012. Source: PwC Global entertainment and media outlook 2013-2017, <http://www.pwc.com/gx/en/global-entertainment-media-outlook/segment-insights/consumer-magazine-publishing.jhtml>. Visited on 26.2.2014.

¹⁶ Statistics Finland: Culture and the Media. *Finnish Mass Media 2011*. Edita Prima Oy, Helsinki 2012. (http://www.stat.fi/tup/julkaisut/tiedostot/julkaisuluettelo/yklt_jvie_201100_2012_4884_net.pdf, p. 143.

¹⁷ Source: Suomen Lehdistö, 5/2013, by The Finnish Newspapers Association.

¹⁸ Source: Suomen Lehdistö 6–7/2012, by The Finnish Newspapers Association.

¹⁹ The Finnish Newspapers Association has 142 members. The member organizations consist of newspaper and city newspaper publishers, groups of companies, distribution companies, news and photo agencies, marketing companies and printing works. The association's members publish 184 newspapers and 56 city newspapers. Source: http://www.sanomalehdet.fi/sanomalehtien_liitto/in_english. Visited on 26.2.2014.

²⁰ Source: <http://www.pwc.com/gx/en/global-entertainment-media-outlook/segment-insights/newspaper-publishing.jhtml>. Visited on 26.2.2014.

Table 2. Sales of dailies, non-dailies, free papers, magazines and other periodicals in 2007 – 2011.

Press	2007	2008	2009	2010	2011	Source
STATISTICS FINLAND						
Press market volume: estimated sales at end-user level (€)	2 043 000 000	2 051 000 000	1 868 000 000	1 894 000 000	1 891 000 000	Finnish Mass Media: Mass media market volume in Finland, Statistics Finland. ²¹
Newspapers and magazines: Estimation of the share of web services in revenue (€)	<i>not available</i>	<i>not available</i>	<i>not available</i>	100 000 000	<i>not available</i>	Finnish Mass Media: Share of web services in mass media revenue by sector 2010, Statistics Finland.
Estimated market share of digital sales (% of all sales)				5.3		

B. MUSIC INDUSTRY

The simplest way to get an estimate of the importance of digital distribution of copyrighted goods and services in the music industry is to look at the retail of recorded music.

Statistics Finland has estimated the size of the recording market in their publication *Cultural Statistics*.²² The yearly estimations presented in table 3 of the retail sales of recordings cover sales at end-user level. Compared to the total sales figures of **IFPI²³ Finland members** at distributor level (also presented in table 3), the estimation of Statistics Finland includes also the sales of non-members of IFPI Finland. Since IFPI Finland members represent ca. 95 % market share of the total music market in Finland, the importance of digital distribution of music could still be assessed – at some level – by looking at the sales figures of IFPI members. It seems that after 2010, Statistics Finland has also given up estimating the sales figures of the recording markets and started publishing only the sales figures of IFPI Finland member companies at distributor level; thus, the figures of IFPI Finland might be the most convenient way of estimating the importance of digital distribution of copyrighted goods and services in the music industry.

According to **Music Finland**, an independent association promoting Finnish music²⁴, the revenue from retail sales of music recordings in 2011 amounted to 66.5 million euros. The estimation was made by

²¹ The market is comprised of retail priced subscription and single copy sales, and the revenue from advertising – covering dailies, non-dailies, free papers, magazines and other periodicals, and not including directories and direct mail. Statistics Finland: Culture and the Media. Finnish Mass Media 2011. Edita Prima Oy, Helsinki 2012. (http://www.stat.fi/tup/julkaisut/tiedostot/julkaisuluettelo/yklt_jvie_201100_2012_4884_net.pdf) Figures of 2010 and 2011 from Statistics Finland's online mass media statistics: Official Statistics of Finland (OSF): Mass media statistics [e-publication]. ISSN=2323-6345. Mass media market 2011. Helsinki: Statistics Finland [referred: 30.8.2013]. (http://tilastokeskus.fi/til/jvie/2011/01/jvie_2011_01_2012-12-12_tie_001_en.html)

²² Statistics Finland: Culture and the Media. Cultural Statistics 2011. Edita Prima Oy, Helsinki 2012. (http://www.stat.fi/tup/julkaisut/tiedostot/isbn_978-952-244-320-5.html) Statistics Finland publishes updated versions of the Cultural Statistics every two years; however, no statistical releases will be issued from cultural statistics in 2013. The corresponding figures concerning the phonogram market volume can be found also from the Mass media statistics of Statistics Finland (Official Statistics of Finland (OSF): Mass media statistics [e-publication]. ISSN=2323-6345. Mass media market 2011. Helsinki: Statistics Finland [referred: 29.8.2013]. (http://www.stat.fi/til/jvie/2011/01/jvie_2011_01_2012-12-12_tie_001_en.html)

²³ International Federation of the Phonographic Industry

²⁴ For more information, see <http://musicfinland.com/en/>

IFPI, and it takes into account the retail overhead and VAT.²⁵ Thus, if an alternative figure is required, IFPI might also give estimations of the retail sales of music recordings in the whole industry. The figure published by Music Finland is approximately 14 % less than the estimation of Statistics Finland (77 million euros) and 61 % more than the wholesale revenue reported by IFPI Finland (roughly 41 million euros).

Table 3. Retail sales of recorded music and the sales of IFPI Finland member companies at distributor level in 2007 – 2011.²⁶							
Music industry	2007	2008	2009	2010	2011	2012	Source
STATISTICS FINLAND							
Estimated retail sales of recordings at end-user level including non-members of IFPI Finland (€)	100 000 000	95 000 000	85 000 000	81 000 000	77 000 000	<i>not available</i>	Cultural Statistics: Recording markets 1999-2010, Statistic Finland. ²⁷
Estimated sales of digital recordings (€)	4 900 000	6 000 000	9 600 000	18 000 000	<i>not available</i>	<i>not available</i>	Cultural Statistics: Recording markets 1999-2010, Statistics Finland.
Estimated market share of digital sales (% of all sales)	4.9	6.3	11.3	22.2			
IFPI FINLAND							
Physical and Digital Sales (€): IFPI Finland members	55 969 303	52 030 463	45 948 078	43 020 564	41 313 085	42 178 471	IFPI Finland. ²⁸ Wholesale without VAT. ²⁹
Value of digital sales (€): IFPI Finland members	2 593 066	2 612 340	4 181 524	7 842 379	8 531 175	11 545 859	IFPI Finland.
IFPI Finland members: market share of digital sales (% of all sales)	4.6	5	9.1	18.2	20.7	27.4	

C. SOFTWARE INDUSTRY

Statistics Finland's *Financial statement statistics on information services* offers an estimation of the overall turnover of the software industry.³⁰ The figure presented concerns the turnover of computer

²⁵ Eero Tolppanen & Tommi Tuomainen: Musiikkialan talous Suomessa 2011. Music Finland – Tunnuslukuja ja tutkimuksia 2, kesäkuu 2012. ISSN 2243-0210. English summary available online. (http://musicfinland.fi/fi/media/dokumentit/MusicFinland_surveys_2b.pdf)

²⁶ The value of digital sales includes online downloads, mobile downloads and subscription income.

²⁷ Value of 2011 from Mass media and cultural statistics, Statistics Finland. <http://www.stat.fi/til/jvie/2011/01/jvie_2011_01_2012-12-12_tie_001_en.html>

²⁸ IFPI Finland. Tilastot: Äänitteiden vuosimyynti. (<http://www.ifpi.fi/tilastot/vuosimyynti/>)

²⁹ See also Statistics Finland: Culture and the Media. Recording markets 1999–2012. (http://www.stat.fi/til/kl/tau_en.html)

³⁰ Official Statistics of Finland (OSF): Financial statement statistics on information services [e-publication, in Finnish]. Helsinki: Statistics Finland [referred: 2.9.2013]. (<http://www.stat.fi/til/iptp/index.html>)

programming, consultancy and related activities. Estimations on the size of the software industry have also been made in the **Software Industry Survey** which is published annually by Aalto University School of Science. The sample of the survey published in 2012 was 421 software companies and the one published in 2011 included 505 software companies. The way the software business total volume has been defined is presented for example in the survey report of 2011.³¹ However, it is stated in the survey report of 2012 that the figures presenting the size of the industry are not comparable to other known figures but they could be useful in comparing changes over time.³²

The Software Industry Survey includes also information concerning the sources of revenue of the software industry. The proportion of revenue that the companies generated from “Providing an application as a service used over the Internet”, which includes the revenue from **ASP and SaaS**³³, is presented in each annual report. The proportion is measured by asking how the revenue of the firm is divided between ten different sources: third party software licenses, ASP and SaaS, Content and ads, Deployment project, Development project, Hardware, Maintenance, Not software related, Other software related, and Own software licenses.³⁴

Table 4. Software industry sales in 2007 – 2011						
Software industry	2007	2008	2009	2010	2011	Source
STATISTICS FINLAND						
Overall turnover of computer programming, consultancy and related activities(€)	5 643 777 000	6 090 491 000	5 517 656 000	5 762 089 000	6 061 400 000	Financial statement statistics on information services, Statistics Finland. ³⁵
SOFTWARE INDUSTRY SURVEY						
Estimation of software revenue in the industry (€)	2 985 000 000	3 090 000 000	3 059 000 000	3 212 000 000	3 468 960 000	Software Industry Survey 2011 and 2012.
Estimation of ASP and SaaS revenue (€)	790 128 780	669 954 010	606 942 160	749 071 570	848 596 000	As estimated according to industry survey

³¹ Mikko Rönkkö, Juhana Peltonen, Dani Pärnänen: Software Industry Survey 2011. Aalto University School of Science, July 4, 2011. (<http://www.softwareindustrysurvey.org/ReportFinland2011.pdf>)

³² See Mikko Rönkkö, Juhana Peltonen: Software Industry Survey 2012. Aalto University School of Science, June 6, 2012, p. 18 (<http://www.softwareindustrysurvey.fi/ReportFinland2012.pdf>): “Overall, our software industry figure is not comparable to any other estimate that we are aware of, but is mostly useful for comparing change over time. In these report we will analyze the industry development over time by looking at aggregate company level outcomes.”

³³ Application Service Provisioning (ASP), also known as “cloud computing”, is a business activity consisting in hosting and providing computer-based services to customers over a network; in other words, customers rent the use of the application and access it over the Internet or via a private line connection. Software offered using an ASP model is also sometimes called software as a service (SaaS).

In the Software Industry Survey 2012 (p. 57), the revenues from these two business activities are identified as the main sources of revenue based on digital distribution: “The other question that we used in this chapter is the share of revenue that the companies generated from ‘Providing an application as a service used over the Internet’. While this captures probably most of the revenue generated with SaaS model, it also captures the revenue from the older ASP model.”

³⁴ Mikko Rönkkö, Juhana Peltonen, Dani Pärnänen: Software Industry Survey 2011. Aalto University School of Science, July 4, 2011, p. 32. (<http://www.softwareindustrysurvey.org/ReportFinland2011.pdf>)

³⁵ Official Statistics of Finland (OSF): Financial statement statistics on information services [e-publication]. Helsinki: Statistics Finland [referred: 3.9.2013]. <https://www.stat.fi/til/iptp/index_en.html>

Estimation of the share of ASP and SaaS revenue of total software revenue (€)	14.0	11.0	11.0	13.0	14.0	Software Industry Survey. ³⁶
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D. AUDIOVISUAL INDUSTRY

An estimate of the overall turnover of the television industry can be found from the Mass media statistics of **Statistics Finland**. The **Finnish Communications Regulatory Authority** (Ficora) gathers information concerning for example television reception methods and popularity of IPTV³⁷ in Finland, but at the moment there are no estimates concerning specifically either IPTV or online TV³⁸ sales available. In 2012 there were approximately 226 000 IPTV subscribers in Finland.³⁹ It is however interesting to notice that, according to International Video Federation's European Video Yearbook 2013, the level of consumer spending on digital video and on movie and TV content delivery through IPTV services has increased rapidly in Finland between 2011 and 2012⁴⁰.

The only estimation concerning the share of web services in revenue of the television industry can be found from the Finnish Mass Media statistics: the figure presents the estimated share of web services in 2010.

Table 5. Television revenue in 2007 – 2012						
Television	2007	2008	2009	2010	2011	Source
STATISTICS FINLAND						
Television market volume: estimated sales at end-user level (€)	865 000 000	946 000 000	940 000 000	970 000 000	1 028 000 000	Mass Media Statistics: Television (terrestrial + cable + satellite) revenue 2001 – 2011, Statistics Finland. ⁴¹
Television: Estimation of the share of web services in revenue (€)	<i>not available</i>	<i>not available</i>	<i>not available</i>	20 000 000	<i>not available</i>	Finnish Mass Media: Share of web services in mass media revenue by sector 2010, Statistics Finland. ⁴²
Market share of digital sales (% of all sales)				2.1		

³⁶ A proportion of revenue: ASP and SaaS. Each figure has been taken from the survey report of the year in question.

³⁷ Internet Protocol television (IPTV) is a system through which television services are delivered using the Internet, instead of being delivered through traditional terrestrial, satellite signal, and cable television formats.

³⁸ Internet television (or online television) is a general term covering the digital distribution of television content via the Internet, without referring to a particular technology used to deliver content, such as IPTV.

³⁹ AV content services in Finland: Viewing of television and video content 2012. Ficora Market Review 7/2012, the Finnish Communications Regulatory Authority, p.5. (http://www.ficora.fi/attachments/6C8d30ToN/Markkinatutkimus_7_2012_EN.pdf)

⁴⁰ The increase amounted to 159 % concerning the spending on digital video, and 62.2 % concerning the spending on movie and TV content through IPTV. Source: International Video Federation's European Video Yearbook 2013, available at <http://www.ivf-video.org/new/public/media/Finland2013.pdf>. Visited on 10.3.2014.

⁴¹ Official Statistics of Finland (OSF): Mass media statistics [e-publication]. ISSN=2323-6345. Helsinki: Statistics Finland [referred: 2.9.2013]. (http://www.tilastokeskus.fi/til/jvie/tau_en.html)

⁴² Statistics Finland: Culture and the Media. Finnish Mass Media 2011. Edita Prima Oy, Helsinki 2012. (http://www.stat.fi/tup/julkaisut/tiedostot/julkaisuluettelo/yklt_jvie_201100_2012_4884_net.pdf)

The market volume of Finnish DVD and VHS has been estimated by **Statistics Finland**. The figures of the **Finnish Chamber of Film** are also presented in the table below. The figures concerning the total sales of audiovisual recordings indicate that the sales of physical copies have decreased during the five years analyzed. Unfortunately, **no VOD⁴³ revenue estimates are available** at the moment. However, the Finnish Chamber of Film has stated that they are developing new methods of data collection, and the information concerning digital sales might be available later on.

Table 6. Sales of audiovisual recordings in 2007 – 2011

Audiovisual recordings	2007	2008	2009	2010	2011	Source
STATISTICS FINLAND						
DVD & VHS market volume: estimated sales at end-user level (€)	150 000 000	153 000 000	145 000 000	148 000 000	130 000 000	Finnish Mass Media: Mass media market volume in Finland 2000-2010. ⁴⁴
FINNISH CHAMBER OF FILM						
DVD sales and rentals (€): wholesale.	90 355 232	92 043 530	80 912 070	79 000 850	67 114 000	Finnish Film Foundation / Finnish Chamber of Film. Values of 2007 and 2008 include also the sales of HD DVDs. ⁴⁵

E. GAME INDUSTRY

The game industry organization Neogames⁴⁶ has studied the yearly development of the turnover of the Finnish game industry core (game development)⁴⁷. The trend has shown rapid positive growth and the estimated turnover in 2012 was 250 Million euros (the figure of 2004 being approximately 40 Million euros).⁴⁸ The industry's estimate for the turnover of 2013 is 800 M €. ⁴⁹ According to Neogames⁵⁰, one of

⁴³ Video on demand (VOD) is a system which allows users to select and watch video content at the time of their choice. IPTV technology is often used to bring video on demand to televisions and personal computers.

⁴⁴ Statistics Finland: Culture and the Media. Finnish Mass Media 2011. Edita Prima Oy, Helsinki 2012. (http://www.stat.fi/tup/julkaisut/tiedostot/julkaisuluettelo/yklt_jvie_201100_2012_4884_net.pdf)

⁴⁵ Finnish Film Foundation: Yearly statistics. (<http://ses.fi/en/statistics/yearly-statistics/>)

⁴⁶ Neogames is "a member-based non-profit game industry organization with a mission is to accelerate, coordinate, and support the development of the Finnish game cluster." (<http://www.neogames.fi/en/>)

⁴⁷ According to a study by Neogames on the Finnish Games Industry (<http://www.neogames.fi/wp-content/uploads/2013/05/Finnish-Games-Industry-2010-2011.pdf>, p.13), "The expansion of the games industry can be seen as a four-stage development.

1. The industry core is the games industry as we know it today. Developing games and offering games services like MMOs
2. The idea of "parallel" IP is also something we have already seen. Max Payne turns to movie and Angry Birds turns to animation. However, there is still lot to do in this area. For instance, utilizing merchandising models is relatively rare in the games industry.
3. Utilizing game-related (or rather game based) know-how in other areas of interactive media.
4. The games industry could also offer solutions and services to other industries. In many cases, the games industry is the leader in innovation when it comes to technology or user interaction. Such areas are, for instance, AI (artificial intelligence), physics modelling, user reward models, etc."

⁴⁸ For more information, see TEKES publication on game industry, http://www.tekes.fi/Julkaisut/peliteollisuus_kehityspolku.pdf. Visited on 20.1.2014.

⁴⁹ See Neogames (2013). Finnish Games Industry 2013, http://www.neogames.fi/wp-content/uploads/2013/05/GameIndustryFinland11_2013.pdf. Visited on 20.1.2014.

the factors influencing the growth of the video game industry has been the rapid spread of network play and digital distribution of games. However, in the course of this study no figure could be found to provide an indication on the share of revenue based on digital distribution.

Table 7. Overall turnover of the game industry in 2007 – 2012							
Game industry	2007	2008	2009	2010	2011	2012	Source
NEOGAMES							
Turnover of the Finnish game industry core (game development) (€)	78 000 000	87 000 000	87 000 000	105 000 000	165 000 000	250 000 000	Neogames: Finnish Games Industry - publications. ⁵¹

SECTION 2. COMPANIES IN SOFTWARE INDUSTRY UTILIZING OPEN LICENSING

When piloting parameter 2, the research was conducted on the business models utilizing open licensing in the software industry, with a focus on open source business activities. Piloting the parameters of the indicator provided information on companies’ turnover, number of employees and the most common business models in open source business activity within the surveyed group. It also resulted in a classification of open source business activity in terms of turnover. The following topics were covered:

- The company’s turnover (in euros)
- The amount of employees
- The importance of the open source business activity in terms of turnover⁵²:
 - a. 25 – 49 percent of total turnover deriving from open source business activity
 - b. 50 – 74 percent of total turnover deriving from open source business activity
 - c. 75 – 100 percent of total turnover deriving from open source business activity
- The business models used by the surveyed companies:
 - a. Services
 - b. Subscription services
 - c. Software as a Service, SaaS
 - d. Integration to software
 - e. Integration to hardware
 - f. Dual licensing
 - g. Open Core, with division into
 - Additional open source software and
 - plugins, which bring additional functionality to open source software
 - h. Aggregator
 - i. Funded with advertising
 - j. Other business models

The data was collected in the course of January and February 2011 from COSS⁵³ member companies excluding sponsoring member companies. The material includes companies whose turnover from open

⁵⁰ Source: Neogame’s study on the Finnish Games Industry, <http://www.neogames.fi/wp-content/uploads/2013/05/Finnish-Games-Industry-2010-2011.pdf>. Visited on 10.3.2014.

⁵¹ Neogames. Industry: Publications. (<http://www.neogames.fi/en/industry-info/publications/>)

⁵² No data was recorded when under 25 percent of total turnover derived from open source business activity.

⁵³ Finnish Centre for Open Source Solutions (COSS, <http://www.coss.fi>)

source business activity was at least 25 percent of the total turnover.⁵⁴ The total number of COSS member companies was, at the time the data was gathered, 140. The number of responding companies whose turnover from open source business activity was at least 25 percent of the total turnover was 18. The respondents to the survey included companies operating in the fields of IT-service, construction trade, Software development and internet services, Software development, Software and consultation services for Internet and telecom for service providers, Internet marketing, internet services and digital marketing concept design, content and document administration, multichannel publishing, electronic commerce, newsletter- mobile and search engine optimization, web-analytics, enterprise services, IT, e-learning and development of know-how, and management of leadership of know-how.⁵⁵

The questionnaire used for the survey can be found in Appendix E.

A. TURNOVER AND NUMBER OF EMPLOYEES

▪ **QUESTION 1. “WHAT PROPORTION OF YOUR TOTAL TURNOVER COMES FROM BUSINESS ACTIVITY UTILIZING OPEN LICENSING (AS A PERCENTAGE)?”**

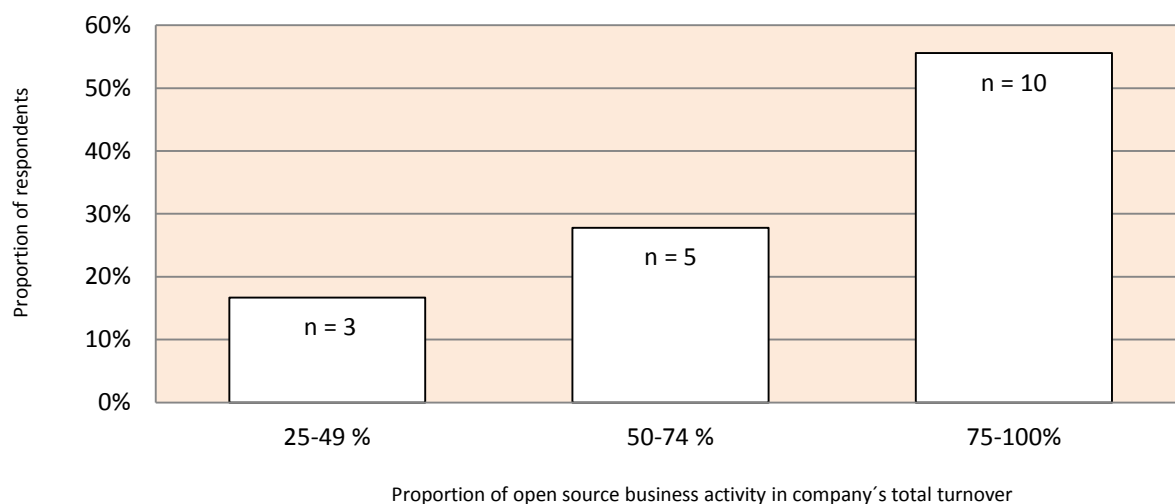
The objective of the first question (see questionnaire in Appendix E) was to examine whether the open source business activity was significant in terms of turnover. It was measured examining what proportion of the company’s total turnover was based on turnover deriving from open source business activity. The proportions were arranged in three classes: (1) 25-49, (2) 50-74 and (3) 75-100 percent of total turnover deriving from open source business activity. Companies falling under 25 percent were not considered as basing their business significantly on open source business activity and were excluded from the group.

More than half (56 percent) of the companies fell into the third class (75-100%) and could be considered basing their business activities significantly on open source software. 28 percent of the companies fell into the second class (50-74%) and 17 percent to the first class (25-49%). It should be noted that the result was more or less to be expected as the survey was sent to the member companies of COSS (an organization focused on open source solutions). Furthermore it should be taken into account that as the data only represents a portion of COSS member companies, the surveyed group most likely does not represent the whole of industry basing its offerings on open source software.

⁵⁴ It should be taken into account that there is no information concerning the total number of companies that participated to the survey, due to a technical error in the survey causing it not to register data from companies whose turnover from open source business activity was less than 25 percent from company’s total turnover.

⁵⁵ The list is based on respondents’ own definitions of the industries on which they operate (see question 6 in Appendix E).

Figure 1. Classification of the respondent companies according to the proportion of open source business activity in their total turnover



▪ **QUESTIONS 2. “WHAT IS THE SIZE OF YOUR TURNOVER?” AND 3. “WHAT IS THE NUMBER OF EMPLOYEES IN YOUR ORGANIZATION?”**

The second and third questions focused on the sizes of companies in software or other industry utilizing open source business activities. The turnover of the respondent companies ranged from 80 000 to 25 000 000 euros and the number of employees from one employee to more than 3 000 employees. The results show that there are large as well as small scale companies in terms of turnover and employment utilizing open licensing in business activities.

Table 8. Companies' turnover in euros and the number of employees		
Respondents	Turnover in euros	Number of employees
Company 7	80 000	2
Company 14	100 000	5
Company 18	100 000	3
Company 5	110 000	2
Company 12	229 000	5
Company 17	230 000	5
Company 10	250 000	2
Company 15	300 000	8
Company 6	450 000	7
Company 4	545 000	13
Company 3	600 000	8
Company 2	700 000	12
Company 11	1 100 000	19
Company 8	1 200 000	16
Company 16	1 300 000	16
Company 1	25 000 000	450
Company 9	no data	1
Company 13	no data	3 000+

B. OPEN LICENSING BUSINESS MODELS

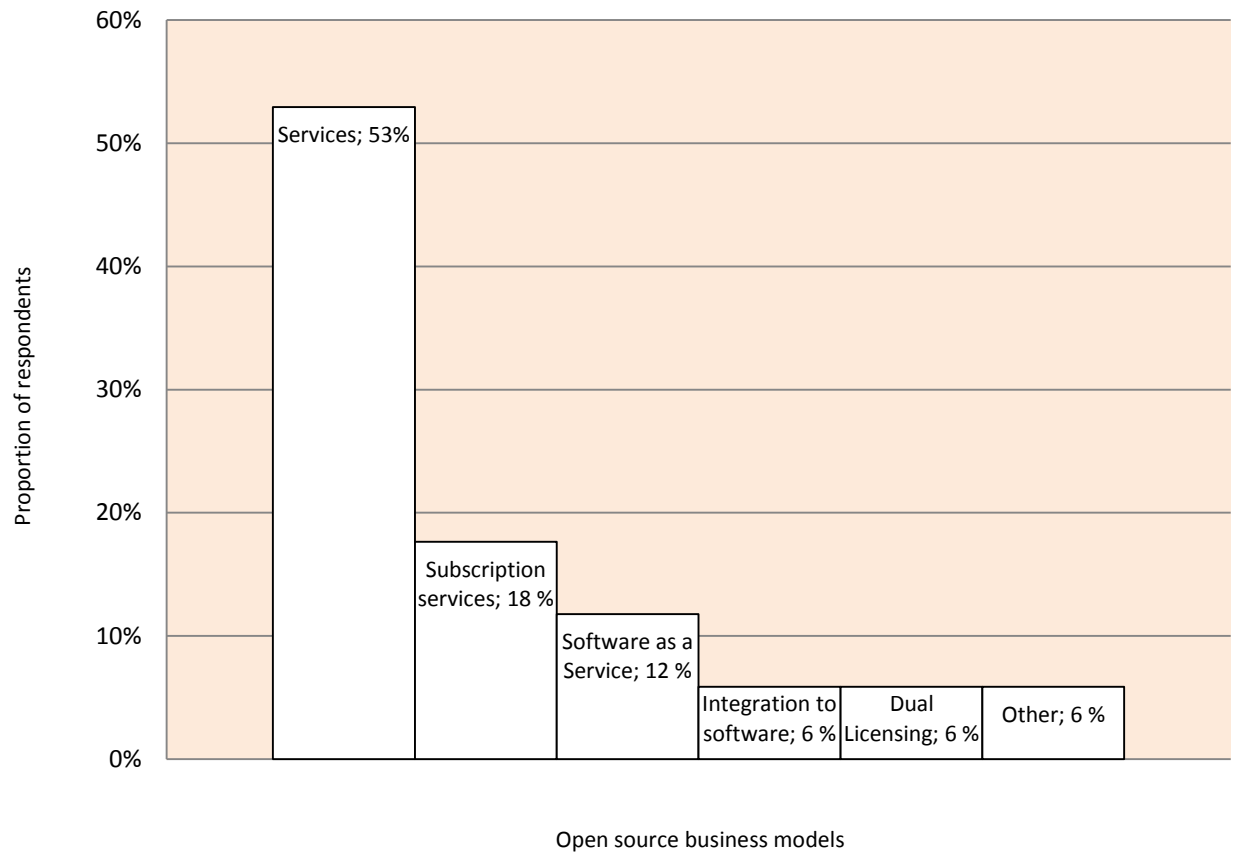
- **QUESTION 4. “WHICH OF THE FOLLOWING BUSINESS MODELS ARE USED IN YOUR ORGANIZATION: PLEASE CHOOSE THE THREE MOST IMPORTANT BUSINESS MODELS”**

In the fourth question the companies were asked to identify the three most used business models in their business activities. The following alternatives were offered:

- a. Services: Commercial services, such as training, tailoring, optimization and integration associated to open source software
- b. Subscription services: The client buys services, which include updating and maintenance of the client’s system
- c. Software as a Service, SaaS: The software is not provided physically to the client. Instead the provider offers services consisting of open source software over the internet.
- d. Integration to software: Open source software is utilized in software and other products delivered to customers
- e. Integration to hardware: Open source software is utilized in hardware delivered to customers
- f. Dual licensing: Software is available in both open and proprietary license. If the client chooses to integrate the software to a closely distributed product, a commercial license of the software has to be acquired
- g. Open Core: The main software is sold together with additional software and extensions that add to the functionality of the main software. The main software is open source and the additional software and plugins open or closed software. Open core is divided into:
 - Additional open source software or
 - plugins, which bring additional functionality to open source software
- h. Aggregator: The supplier aggregates a unit of a variety of open source software for the client
- i. Funded with advertising: The open source software comes with advertisements or product and service placement
- j. Other business models (free form answer)

The most common business models among the respondents to this survey were services (53 percent), subscription services (18 percent), software as a service, SaaS (12 percent), open core, integration to software (6 percent), dual licensing (6 percent), and subcontracting within other business models category (6 percent). It can be noted that open source business models most often focus on services and after that on software development.

Figure 2. Open source business models used by the respondents



Conclusions

A. ANALYSIS AND SUMMARY OF THE RESULTS

▪ THE MARKET SHARE OF DIGITAL SALES IN CORE COPYRIGHT INDUSTRIES

Section 1 of this report provided an overview of the proportion of digital sales from all sales in certain copyright-based industries: press and literature, music industry, software industry, audiovisual industry, and game industry. The review was based on data provided by industry organizations or associations, as well as other actors such as Statistics Finland. As an overview it provides information that could be used as a basis for more comprehensive future studies.

Concerning the press and literature industries, the share of web services in the sales of Finnish literature in 2010 was 2 %, and the market share of digital sales for members of the Finnish Book Publishers Association increased from 2.6 % (in 2007) to 5.7 % (in 2012) of all sales. An estimation concerning the share of web services in the revenue of newspapers and magazines dating from 2010 amounted to 5.3 %. Digital sales therefore seem to constitute a small but possibly growing portion of all sales in the press and literature industries.

Sales figures concerning IFPI Finland members (representing about 95% of the total Finnish music market), indicate that the market share of digital sales concerning Finnish music recordings has evolved from 4.6 % in 2007 to 27.4 % in 2012. Comparison with data provided by Statistics Finland concerning the years 2007 to 2010 seems to indicate that these proportions might be slightly underestimated.

A survey concerning the software industry and published annually by Aalto University School of Science estimates the share of the two main types of digital distribution of softwares, ASP and SaaS, at a percentage varying between 11 and 14 during the period 2007-2011. These figures however are mainly designed to provide comparisons over time.

Concerning the audiovisual industry, a figure concerning the market share of digital sales in television revenue dating from 2010 amounted at the time to 2.1 %. Although the market volume of Finnish DVD and VHS sales has been estimated by Statistics Finland, no information concerning digital distribution of content in the form of VOD revenue estimates is available at the moment.

Finally, in the game industry, while the turnover of game development is rapidly increasing (from 78 million euros in 2007 to 250 million euros in 2012), the proportion of revenue based on digital distribution is unknown.

▪ COMPANIES IN SOFTWARE INDUSTRY UTILIZING OPEN LICENSING

The survey based on parameter 2 of the methodology card included questions on the significance of open source business activities in terms of turnover and employment and on the different open source business models adopted by COSS member companies. The focus in this pilot study was on open source business activities.

The process of piloting showed that there is no data concerning business activities utilizing open licensing. Whereas business activities utilizing open licensing, are not a recent phenomenon, there is no industry classification nor a publicly available list of companies representing the industry classification. However a definition of open source business activity was drafted during the piloting. Ilkka Lehtinen, the executive director at COSS, defined business activities utilizing open source software in terms of company's turnover. In his definition of open source business activities, turnover deriving from open source business activity should cover at least 25 percent of a company's total turnover. For the purposes

of emphasizing the significance of open licensing in business activity, the threshold of open source business activity in a company's turnover can be set to 50 percent.

Piloting also brought forward information on the amount of turnover and employment and the ways in which open source business activities is conducted. Firstly, the results showed that there is open source business activity, both small and large scale in terms of turnover and employment. Secondly, the results showed that two of the most common open source business models operated on services and the rest of the most common business models were oriented to software development offering also services associated to open source software. Finally, the results revealed the industries in which the companies using open source business models operate.

It should be taken into account that the data was gathered from a relatively small group of COSS member companies. Hence the surveyed group is unlikely to represent the whole group of companies utilizing open source software. It also excludes the group of companies that utilize open licensing in business activity in other industries. Due to error in implementing the survey to Google Docs, companies under the threshold of 25 percent were not registered to the data. Hence there is no information of the total number of the companies that participated in the survey. Despite of the shortcomings, this pilot can assist in developing the indicator and the questions further.

B. METHODOLOGICAL FINDINGS

▪ LIMITATIONS

Concerning the first parameter, the market share of digital sales in core copyright industries, there were various figures concerning the amount of sales available: *turnover* or *revenue* of companies in an industry, *market volume* of an industry and *sales at end-user* level in an industry. Moreover, the figures sometimes concerned the wholesale prices and at other times the retail prices of goods. It was therefore difficult to establish comparable figures and meaningful percentages. Another important limitation is the lack of existing data concerning the amount of digital sales in the industries considered. In some cases, only partial or outdated data existed, and in others, no data was available. Future and more in-depth studies will be necessary to gain a more precise evaluation of the importance of digital sales in core copyright industries.

The study based on parameter 2 of the methodology card was conducted on the business models utilizing open licensing, with a focus on open source business activities. The study covered a limited number of companies, as the main purpose was to test the parameter as part of the development of the methodology. Its findings are therefore not representative of the industry as a whole.

There is no information concerning the total number of companies that participated to the survey based on Parameter 2 of the methodology card (Section 2 of the Results chapter), due to a technical error in the survey causing it not to register data from companies whose turnover from open source business activity was less than 25 percent from company's total turnover.

▪ GUIDELINES FOR FUTURE RESEARCH

Concerning the first parameter, the data is easily found as long as relevant statistics and databases exist. The task consists mainly in gathering information; a relatively small amount of analysis work is necessary.

The process of piloting the second parameter provided insights on how to conduct future research. During desktop research the first task is to locate relevant sources of information from the Internet. The objective is to find information concerning industry classification for business activity utilizing open

licensing. The most relevant information sources include statistics organizations and state funded as well as commercial business databases. In addition to databases, the organizations supporting business activities that utilize open licensing could be consulted. If relevant databases cannot be located, gathering data should be done using statistical research methods; in this case, the research could be limited to businesses basing at least 50% of their activity on open source. If possible researchers should try and get access to statistical research done by organizations gathering statistical data.

The time needed for this pilot study will depend for each country on the availability of data and the country's inclusion in international databases, statistical researches and international indexes. In the case of Finland, the data for Parameter 2 was collected by the means of a survey. The workload for collecting data and drafting this report could be evaluated at two weeks of full-time work for Parameter 1 and six weeks of full-time work for Parameter 2. With the help of an already-made list of useful references or already available statistics, this time could be reduced.

Appendices

A. METHODOLOGY CARD

Methodology card as presented in the Methodology Handbook, version 20.12.2013.

Area: Value creation and the markets	Methodology card 4. Development of digital business models and income based on digital distribution
Key question	Are digital distribution and open licensing business models being used in core copyright industries? How successful digital business models are in economic terms?
Type of data	<i>objective data</i>
Description	<p>Income flows based on different digital distribution and and open licensing business models in core copyright industries The data can be collected through desktop study or survey. <u>Possible industries to consider:</u></p> <ul style="list-style-type: none"> a) Newspapers and magazines b) Books c) Film industry d) Broadcasters e) Game industry f) Phonograms g) Computer programs (/software) <p>Studies concerning digital distribution could focus on internet radio, e-book stores, online gaming, streaming audio and video on demand (VOD). <i>Exemplary questionnaires for surveys and interviews are presented in a separate toolkit.</i></p>
Parameters to measure	<ol style="list-style-type: none"> 1. The market share of digital sales (as a % of all sales) in core copyright industries Consider the business models listed in Description sheet 4. 2. Number and turnover of companies in software or other core copyright industries basing their offering on open licensing or utilizing open licensing to a notable degree <u>The analysis can be made on:</u> <ul style="list-style-type: none"> - Open source business models (concerning software industry), and/or - Other business models utilizing open licensing (concerning any core copyright industry) <u>Possible business models to consider:</u> <ul style="list-style-type: none"> - Association of open licensed content to commercial services - Implementation of open licensed content to proprietary software and hardware - Association of open licensed works to advertising, product placement and service placement (marketing) - Dual licensing
Guidelines for data collection	Data for both parameters can be collected as a desktop study from official statistics and industry statistics and databases or as surveys focusing on different industries separately.

Definitions	<i>Digital distribution</i>	<i>Distribution of copyrighted material through the internet, mobile networks or cable connection</i>
	<i>Open license</i>	<i>License that with few or no restrictions grants permission to access to content (any kind of artistic and literary works) and provides the possibility to modify and redistribute it as long as attribution is given to the authors. Most common open licenses are: GPL 2.0 (GNU General Public License), LGPL (GNU Lesser General Public License), BSD License, MIT License, MPL 1.1 (Mozilla Public License), Apache 2.0 (Apache License), X11 (X11 License), CC (Creative Commons).</i>
	<i>Open source business activity</i>	<i>Open source business activity is based on utilizing user-generated open licensed software. Open source business models are based on offering services associated to open source software and its development (i.e. training, updating and maintenance services).</i>
	<i>Dual licensing</i>	<i>In dual licensing business model software is available under both open licensing and proprietary licensing. Open licensing offers the support of the community of developers while proprietary licensing offers customer the possibility to develop the software without having to release the source codes (MySQL).</i>
Limitations of the indicator	Acquiring information of companies' income flows may present some difficulties as the information on companies' revenues can be confidential.	

B. RESULT TABLES

SECTION 1. THE MARKET SHARE OF DIGITAL SALES IN CORE COPYRIGHT INDUSTRIES

Table A1. Sales of books in Finland in 2007 – 2012							
Literature	2007	2008	2009	2010	2011	2012	Source
STATISTICS FINLAND							
Book market volume: estimated sales at end-user level. (€)	559 000 000	566 000 000	570 000 000	577 000 000	570 000 000	562 000 000	Finnish Mass Media: Mass media market volume in Finland, Statistics Finland. ⁵⁶
FINNISH BOOK PUBLISHERS ASSOCIATION							
Total sales (€): Finnish Book Publishers Association (FBPA).	281 998 600	291 002 000	268 266 000	274 686 000	275 909 000	262 955 000	Finnish Book Publishers Association. Sales of books in Finland. ⁵⁷

⁵⁶ Sales at end-user level. Only the values of 2010 to 2012 include digital sales. Starting from 2011, the sales of books from the publishers of newspapers and magazines are not included in the figures.

Figures until 2009 from Statistics Finland: Culture and the Media. Finnish Mass Media 2011. Edita Prima Oy, Helsinki 2012. (http://www.stat.fi/tup/julkaisut/tiedostot/julkaisuluettelo/yklt_jvie_201100_2012_4884_net.pdf). Figures from 2010 - 2012 from Statistics Finland's online mass media statistics: Official Statistics of Finland (OSF): Mass media statistics [e-publication]. ISSN=2323-6345. Mass media market 2011. Helsinki: Statistics Finland [referred: 30.8.2013]. (http://tilastokeskus.fi/til/jvie/2011/01/jvie_2011_01_2012-12-12_tie_001_en.html) and Official Statistics of Finland (OSF): Mass media statistics [e-publication]. ISSN=2323-6345. 2012. Helsinki: Statistics Finland [referred: 10.3.2014]. (http://www.tilastokeskus.fi/til/jvie/2012/jvie_2012_2013-11-27_tie_001_en.html).

⁵⁷ Total sales of literature types 2008–2012, without VAT. Printed books and Digital publications total. Finnish Book Publishers Association: Facts and figures. Sales of Books in Finland. (<http://tilastointi.kustantajat.fi/PublicReporting/Yearly.aspx?reportName=SalesHistoryGenresPrintAndDigital-C.xml&language=ENG>)

Value of digital sales (€): FBPA.	7 296 700	7 263 000	8 400 000	9 346 200	13 322 800	15 009 500	Finnish Book Publishers association. Sales of books in Finland. ⁵⁸
FBPA: market share of digital sales (% of all sales)	2.6	2.5	3.1	3.4	4.8	5.7	Proportion of digital sales of the members of the Finnish Book Publishers Association.

Table A2. Sales of dailies, non-dailies, free papers, magazines and other periodicals in 2007 – 2011.							
Press	2007	2008	2009	2010	2011		Source
STATISTICS FINLAND							
Press market volume: estimated sales at end-user level (€)	2 043 000 000	2 051 000 000	1 868 000 000	1 894 000 000	1 891 000 000		Finnish Mass Media: Mass media market volume in Finland, Statistics Finland. ⁵⁹
Newspapers and magazines: Estimation of the share of web services in revenue (€)	<i>not available</i>	<i>not available</i>	<i>not available</i>	100 000 000	<i>not available</i>		Finnish Mass Media: Share of web services in mass media revenue by sector 2010, Statistics Finland.
Estimated market share of digital sales (% of all sales)				5.3			

Table A3. Retail sales of recorded music and the sales of IFPI Finland member companies at distributor level in 2007 – 2011.⁶⁰							
Music industry	2007	2008	2009	2010	2011	2012	Source
STATISTICS FINLAND							
Estimated retail sales of recordings at end-user level including non-members of IFPI Finland (€)	100 000 000	95 000 000	85 000 000	81 000 000	77 000 000	<i>not available</i>	Cultural Statistics: Recording markets 1999-2010, Statistic Finland. ⁶¹

⁵⁸ Yearly sales, digital publications; does not include recorded audiobooks. Finnish Book Publishers Association: Facts and figures. Sales of Books in Finland.

(<http://tilastointi.kustantajat.fi/PublicReporting/Yearly.aspx?reportName=YearlySalesEurDigital.xml&language=ENG>)

⁵⁹ The market is comprised of retail priced subscription and single copy sales, and the revenue from advertising – covering dailies, non-dailies, free papers, magazines and other periodicals, and not including directories and direct mail. Statistics Finland: Culture and the Media. Finnish Mass Media 2011. Edita Prima Oy, Helsinki 2012.

(http://www.stat.fi/tup/julkaisut/tiedostot/julkaisuluettelo/yklt_jvie_201100_2012_4884_net.pdf) Figures of 2010 and 2011 from Statistics Finland's online mass media statistics: Official Statistics of Finland (OSF): Mass media statistics [e-publication].

ISSN=2323-6345. Mass media market 2011. Helsinki: Statistics Finland [referred: 30.8.2013].

(http://tilastokeskus.fi/til/jvie/2011/01/jvie_2011_01_2012-12-12_tie_001_en.html)

⁶⁰ The value of digital sales includes online downloads, mobile downloads and subscription income.

⁶¹ Value of 2011 from Mass media and cultural statistics, Statistics Finland.

<http://www.stat.fi/til/jvie/2011/01/jvie_2011_01_2012-12-12_tie_001_en.html>

Estimated sales of digital recordings (€)	4 900 000	6 000 000	9 600 000	18 000 000	<i>not available</i>	<i>not available</i>	Cultural Statistics: Recording markets 1999-2010, Statistics Finland.
Estimated market share of digital sales (% of all sales)	4.9	6.3	11.3	22.2			
IFPI FINLAND							
Physical and Digital Sales (€): IFPI Finland members	55 969 303	52 030 463	45 948 078	43 020 564	41 313 085	42 178 471	IFPI Finland. ⁶² Wholesale without VAT. ⁶³
Value of digital sales (€): IFPI Finland members	2 593 066	2 612 340	4 181 524	7 842 379	8 531 175	11 545 859	IFPI Finland.
IFPI Finland members: market share of digital sales (% of all sales)	4.6	5	9.1	18.2	20.7	27.4	

Table A4. Software industry sales in 2007 – 2011

Software industry	2007	2008	2009	2010	2011	Source
STATISTICS FINLAND						
Overall turnover of computer programming, consultancy and related activities(€)	5 643 777 000	6 090 491 000	5 517 656 000	5 762 089 000	6 061 400 000	Financial statement statistics on information services, Statistics Finland. ⁶⁴
SOFTWARE INDUSTRY SURVEY						
Estimation of software revenue in the industry (€)	2 985 000 000	3 090 000 000	3 059 000 000	3 212 000 000	3 468 960 000	Software Industry Survey 2011 and 2012.
Estimation of ASP and SaaS revenue (€)	790 128 780	669 954 010	606 942 160	749 071 570	848 596 000	As estimated according to industry survey
Estimation of the share of ASP and SaaS revenue of total software revenue (€)	14.0	11.0	11.0	13.0	14.0	Software Industry Survey. ⁶⁵

⁶² IFPI Finland. Tilastot: Äänitteiden vuosimyynti. (<http://www.ifpi.fi/tilastot/vuosimyynti/>)

⁶³ See also Statistics Finland: Culture and the Media. Recording markets 1999–2012. (http://www.stat.fi/til/klt/tau_en.html)

⁶⁴ Official Statistics of Finland (OSF): Financial statement statistics on information services [e-publication]. Helsinki: Statistics Finland [referred: 3.9.2013]. <https://www.stat.fi/til/iptp/index_en.html>

⁶⁵ A proportion of revenue: ASP and SaaS. Each figure has been taken from the survey report of the year in question.

Table A5. Television revenue in 2007 – 2012						
Television	2007	2008	2009	2010	2011	Source
STATISTICS FINLAND						
Television market volume: estimated sales at end-user level (€)	865 000 000	946 000 000	940 000 000	970 000 000	1 028 000 000	Mass Media Statistics: Television (terrestrial + cable + satellite) revenue 2001 – 2011, Statistics Finland. ⁶⁶
Television: Estimation of the share of web services in revenue (€)	<i>not available</i>	<i>not available</i>	<i>not available</i>	20 000 000	<i>not available</i>	Finnish Mass Media: Share of web services in mass media revenue by sector 2010, Statistics Finland. ⁶⁷
Market share of digital sales (% of all sales)				2.1		

Table A6. Sales of audiovisual recordings in 2007 – 2011						
Audiovisual recordings	2007	2008	2009	2010	2011	Source
STATISTICS FINLAND						
DVD & VHS market volume: estimated sales at end-user level (€)	150 000 000	153 000 000	145 000 000	148 000 000	130 000 000	Finnish Mass Media: Mass media market volume in Finland 2000-2010. ⁶⁸
FINNISH CHAMBER OF FILM						
DVD sales and rentals (€): wholesale.	90 355 232	92 043 530	80 912 070	79 000 850	67 114 000	Finnish Film Foundation / Finnish Chamber of Film. Values of 2007 and 2008 include also the sales of HD DVDs. ⁶⁹

Table A7. Overall turnover of the game industry in 2007 – 2012							
Game industry	2007	2008	2009	2010	2011	2012	Source
NEOGAMES							
Turnover of the Finnish game industry core (game development) (€)	78 000 000	87 000 000	87 000 000	105 000 000	165 000 000	250 000 000	Neogames: Finnish Games Industry - publications. ⁷⁰

⁶⁶ Official Statistics of Finland (OSF): Mass media statistics [e-publication]. ISSN=2323-6345. Helsinki: Statistics Finland [referred: 2.9.2013]. (http://www.tilastokeskus.fi/til/jvie/tau_en.html)

⁶⁷ Statistics Finland: Culture and the Media. Finnish Mass Media 2011. Edita Prima Oy, Helsinki 2012. (http://www.stat.fi/tup/julkaisut/tiedostot/julkaisuluettelo/yklt_jvie_201100_2012_4884_net.pdf)

⁶⁸ Statistics Finland: Culture and the Media. Finnish Mass Media 2011. Edita Prima Oy, Helsinki 2012. (http://www.stat.fi/tup/julkaisut/tiedostot/julkaisuluettelo/yklt_jvie_201100_2012_4884_net.pdf)

⁶⁹ Finnish Film Foundation: Yearly statistics. (<http://ses.fi/en/statistics/yearly-statistics/>)

⁷⁰ Neogames. Industry: Publications. (<http://www.neogames.fi/en/industry-info/publications/>)

▪ SECTION 2: COMPANIES IN SOFTWARE INDUSTRY UTILIZING OPEN LICENSING

Figure A1. Classification of the respondent companies according to the proportion of open source business activity in their total turnover

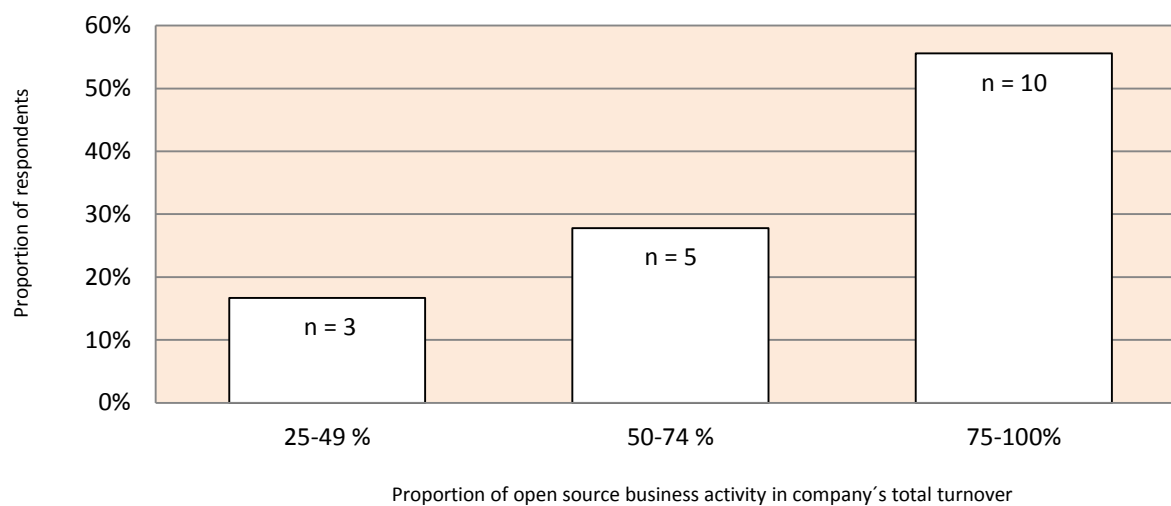


Table A8. Companies' turnover in euros and the number of employees		
Respondents	Turnover in euros	Number of employees
Company 7	80 000	2
Company 14	100 000	5
Company 18	100 000	3
Company 5	110 000	2
Company 12	229 000	5
Company 17	230 000	5
Company 10	250 000	2
Company 15	300 000	8
Company 6	450 000	7
Company 4	545 000	13
Company 3	600 000	8
Company 2	700 000	12
Company 11	1 100 000	19
Company 8	1 200 000	16
Company 16	1 300 000	16
Company 1	25 000 000	450
Company 9	no data	1
Company 13	no data	3 000+

Figure A2. Open source business models used by the respondents

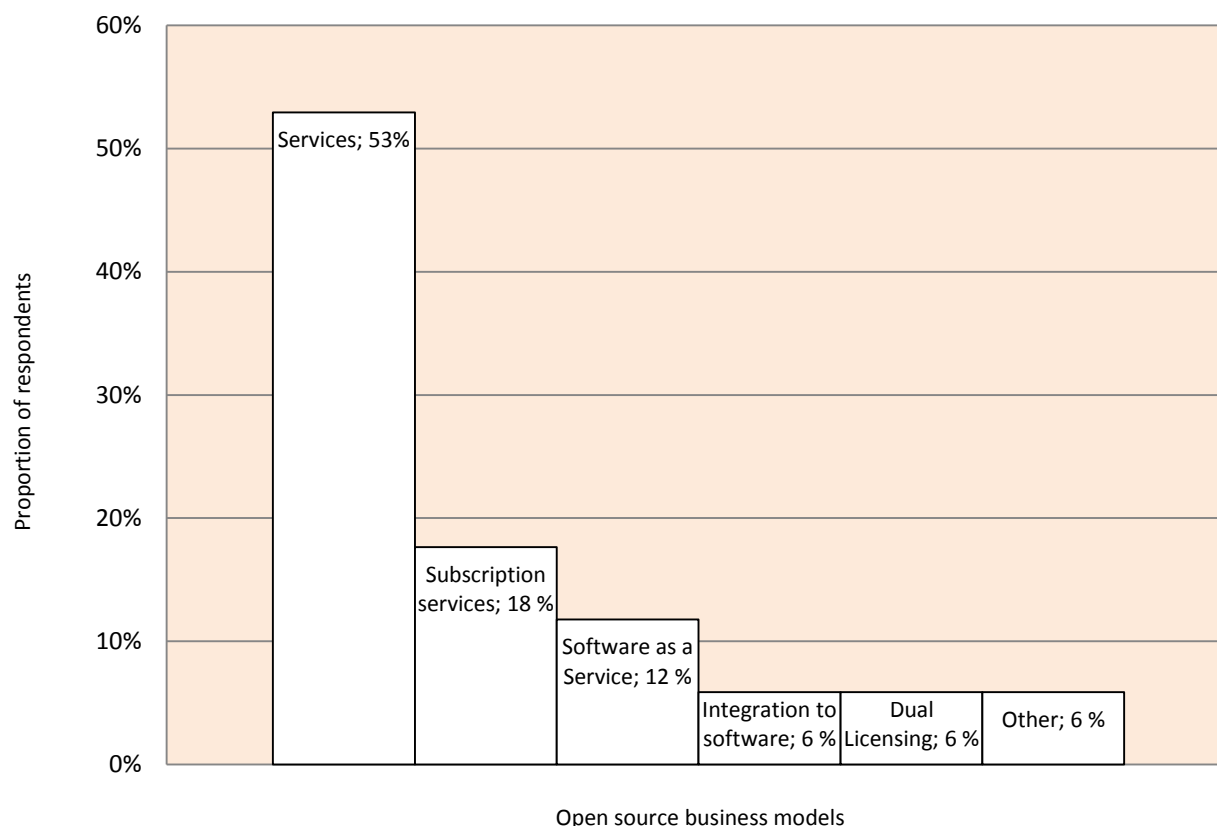


Table A9. Companies' turnover in euros and the number of employees														
(*)	1	2	3	4a	4b	4c	4d	4e	4f	4g	(i)	(ii)	4h	4i
	25-49 %	25 000 000	450	3		2	3	1						
	75-100%	700 000	12	1	3	3	2	1	1	3	2	3	3	3
	75-100%	600 000	8				2	3				1		
	75-100%	545 000	13	1				2					3	
	50-74 %	110 000	2			3	1	2						
	75-100%	450 000	7	1				2						
	50-74 %	80 000	2	3					2					1
	50-74 %	1 200 000	16	1				3					2	
	25-49 %	no data	1	1	2				3					
	75-100%	250 000	2	1					2				3	
	75-100%	1 100 000	19	1				2	3					
	75-100%	229 000	5	1									2	3
	75-100%	no data	3 000+	1				3					2	
	50-74 %	100 000	5	2				1					3	
	75-100%	300 000	8	2				3	1					
	75-100%	1 300 000	16	1	3	3	1	1	2	3	2	1	1	3
	25-49 %	230 000	5	1							2		3	
	50-74 %	100 000	3	1	3	1	1	1	1					

(*) Companies;

(1) Classification of open source business activity in terms of turnover;

(2) Company's turnover in euros;

(3) Number of employees;

(4) Business models used by company; 1 most used, 2 less used, 3 least used, empty cell not used;

a. Services; b. Funded with advertisements; c. Integration to hardware; d. Integration to software; e. Subscription services; f. Software as a Service, SaaS; g. Open Core (i) Additional open source software or (ii) plugins, which bring additional functionality to open source software; h. Dual licensing; i. Aggregator; j. Other business models

C. INFORMATION SOURCES

International:

- Eurostat : <http://epp.eurostat.ec.europa.eu> (*Features data on the share of enterprises' turnover on e-commerce, per country*)
- The UK Intellectual Property Office: Changing Business Models in the Creative Industries - <http://www.ipo.gov.uk/pro-ipresearch/ipresearch-year/ipresearch-year-2011.htm>

Finland:

- Finder (<http://www.finder.fi>)
- Finnish Film Foundation: Yearly statistics. (<http://ses.fi/en/statistics/yearly-statistics/>)
- Finnish Funding Agency for Technology and Innovation (TEKES) (<http://www.tekes.fi>)
- IFPI Finland. *Tilastot: Äänitteiden vuosimyynti*. (<http://www.ifpi.fi/tilastot/vuosimyynti/>)
- International Video Federation's European Video Yearbook 2013, country profile: Finland, available at <http://www.ivf-video.org/new/public/media/Finland2013.pdf>
- Mikko Rönkkö, Juhana Peltonen, Dani Pärnänen: *Software Industry Survey 2011*. Aalto University School of Science, July 4, 2011 (<http://www.softwareindustrysurvey.org/ReportFinland2011.pdf>)
- Mikko Rönkkö, Juhana Peltonen: *Software Industry Survey 2012*. Aalto University School of Science, June 6, 2012 (<http://www.softwareindustrysurvey.fi/ReportFinland2012.pdf>)
- Music Finland (<http://musicfinland.com/en/>), including:
 - Eero Tolppanen & Tommi Tuomainen: *Musiikkialan talous Suomessa 2011*. Music Finland – Tunnuslukuja ja tutkimuksia 2, kesäkuu 2012. ISSN 2243-0210. English summary available online. (http://musicfinland.fi/fi/media/dokumentit/MusicFinland_surveys_2b.pdf)
- Neogames (<http://www.neogames.fi>), including:
 - The Finnish Games Industry 2010-2011, <http://www.neogames.fi/wp-content/uploads/2013/05/Finnish-Games-Industry-2010-2011.pdf>.
 - The Game Industry of Finland, 2013, http://www.neogames.fi/wp-content/uploads/2013/05/GameIndustryFinland11_2013.pdf.
 - Neogames. Industry: Publications. (<http://www.neogames.fi/en/industry-info/publications/>)
- PwC, *Global entertainment and media outlook*, available at <http://www.pwc.com/gx/en/global-entertainment-media-outlook/segment-insights/newspaper-publishing.jhtml>
- Statistics Finland (<http://www.stat.fi>), including:
 - Culture and the Media. Finnish Mass Media 2011. Edita Prima Oy, Helsinki 2012. (http://www.stat.fi/tup/julkaisut/tiedostot/julkaisuluettelo/yklt_jvie_201100_2012_4884_net.pdf)
 - Culture and the Media. Recording markets 1999–2012. (http://www.stat.fi/til/klt/tau_en.html)
 - Official Statistics of Finland (OSF): Financial statement statistics on information services [e-publication, in Finnish]. Helsinki: Statistics Finland [referred: 2.9.2013]. (<http://www.stat.fi/til/iptp/index.html>)
 - Official Statistics of Finland (OSF): Mass media statistics [e-publication]. ISSN=2323-6345. Helsinki: Statistics Finland [referred: 30.8.2013]. (http://tilastokeskus.fi/til/jvie/index_en.html)
- The Business Information System (BIS) (<http://www.ytj.fi>)
- The Finnish Book Publishers Association. (<http://www.kustantajat.fi/en/association/>), including:
 - Facts and figures. Sales of Books in Finland. (<http://tilastointi.kustantajat.fi/PublicReporting/Yearly.aspx?language=ENG>)
- The Finnish Communications Regulatory Authority, *AV content services in Finland: Viewing of television and video content 2012*. Ficora Market Review 7/2012. (http://www.ficora.fi/attachments/6C8d30ToN/Markkinatutkimus_7_2012_EN.pdf)
- The Finnish Newspapers Association:
 - Suomen Lehdistö 6–7/2012
 - Suomen Lehdistö, 5/2013
- The Finnish Trade Register (<http://www.prh.fi/fi/kaupparekisteri.html>)

D. CONSULTED PARTIES

Heikkinen, Jukka (professor of Electronic Business at the University of Jyväskylä)
Kangas, Anita (Professor of Cultural Policy at the University of Jyväskylä),
Lehtinen, Ilkka (executive director of the Finnish Centre for Open Source Solutions, COSS)
Mitchell, Ritva (Research Director at CUPORE)
Saastamoinen, Matti (training services, business development, licensing, COSS)
Setälä, Manu (director, embedded systems, TEKES)
Setälä, Risto (director, software and digital media industries, TEKES)
Taskinen Timo (Group Manager at TEKES)

E. QUESTIONNAIRE USED FOR THE SURVEY

QUESTIONS CONCERNING THE ECONOMIC SIGNIFICANCE OF OPEN LICENSING IN BUSINESS ACTIVITY

1. What proportion of your total turnover comes from business activity utilizing open licensing (as a percentage)?
 - Under 50 percent
 - 50-74 percent
 - 75-100 percent
2. What is the size of your turnover? (amount in country's currency)
3. What is the number of employees in your organization?

QUESTIONS CONCERNING BUSINESS MODELS

4. Which of the following business models are used in your organization:
Please choose the three most important business models (1: most important, 2: second important, 3. least important):
 - (1) Open source business models
 - a. Services: Commercial services, such as training, tailoring, optimization and integration associated to open source software
 - b. Subscription services: The client buys services, which include updating and maintenance of the client's system
 - c. Software as a Service, SaaS: The software is not provided physically to the client. Instead the provider offers services consisting of open source software over the internet.
 - d. Integration to software: Open source software is utilized in software and other products delivered to customers
 - e. Integration to hardware: Open source software is utilized in hardware delivered to customers
 - f. Dual licensing: Software is available in both open and proprietary license. If the client chooses to integrate the software to a closely distributed product, a commercial license of the software has to be acquired
 - g. Open Core: The main software is sold together with additional software and extensions that add to the functionality of the main software. The main software is open source and the additional software and plugins open or closed software. Open core is divided into:
 - (i) additional open source software or

- (ii) plugins, which bring additional functionality to open source software
 - h. Aggregator: The supplier aggregates a unit of a variety of open source software for the client
 - i. Funded with advertising: The open source software comes with advertisements or product and service placement
 - j. Other
- (2) Other possible business activity utilizing open licensing to consider
- a. Business activity utilizing open licensed work focused on literary and artistic work
 - b. Cultural productions and information service (user-generated film productions, Wikipedia, and search engines)

QUESTIONS CONCERNING BACKGROUND INFORMATION

5. What are the name and location of your organization?
6. In what industry/ies is your company operating?

Assessing Copyright and Related Rights Systems: Piloting of the methodology framework in Finland

Cupore webpublications 39:1	<i>National Context. Report on Piloting in Finland.</i>
Cupore webpublications 39:2	<i>International and Regional Context. Report on Piloting in Finland.</i>
Cupore webpublications 39:3	<i>Technological Development. Report on Piloting in Finland.</i>
Cupore webpublications 39:4	<i>Macroeconomic Importance of Copyright Industries. Report on Piloting in Finland.</i>
Cupore webpublications 39:5	<i>Markets for Copyrighted Products and Services – Focus: Literature (Book Publishing Industry). Report on Piloting in Finland.</i>
Cupore webpublications 39:6	<i>Volume of Domestic Production of Copyrighted Products and Services. Report on Piloting in Finland.</i>
Cupore webpublications 39:7	<i>Volume of Exported and Imported Copyrighted Products and Services. Report on Piloting in Finland.</i>
Cupore webpublications 39:8	<i>Development of Digital Business Models and Income Based on Digital Distribution. Report on Piloting in Finland.</i>
Cupore webpublications 39:9	<i>Copyright Law. Report on Piloting in Finland.</i>
Cupore webpublications 39:10	<i>Copyright Policy. Report on Piloting in Finland.</i>
Cupore webpublications 39:11	<i>Public Consultation on Law Proposals. Report on Piloting in Finland.</i>
Cupore webpublications 39:12	<i>Use of Impact Assessment and Research in Policy Development. Report on Piloting in Finland.</i>
Cupore webpublications 39:13	<i>Public Administration of Copyright. Report on Piloting in Finland.</i>
Cupore webpublications 39:14	<i>Enforcement by Public and Private Actors – Focus: Public Authorities. Report on Piloting in Finland.</i>
Cupore webpublications 39:15	<i>Enforcement by Public and Private Actors – Focus: Private Actors. Report on Piloting in Finland.</i>
Cupore webpublications 39:16	<i>Sanctions and Remedies for Copyright Infringement. Report on Piloting in Finland.</i>
Cupore webpublications 39:17	<i>Application of Sanctions and Remedies for Copyright Infringement. Report on Piloting in Finland.</i>
Cupore webpublications 39:18	<i>Availability of Alternative Dispute Resolution Mechanisms. Report on Piloting in Finland.</i>
Cupore webpublications 39:19	<i>Use of Alternative Resolution Mechanisms for Solving Copyright Disputes. Report on Piloting in Finland.</i>
Cupore webpublications 39:20	<i>Individual Exercise of Rights – Focus: Literature (Book Publishing Industry). Report on Piloting in Finland.</i>
Cupore webpublications 39:21	<i>Collective Management of Rights. Report on Piloting in Finland.</i>
Cupore webpublications 39:22	<i>Efficiency of Collective Management Organizations. Report on Piloting in Finland.</i>
Cupore webpublications 39:23	<i>Copyright-related Information Activities. Report on Piloting in Finland.</i>
Cupore webpublications 39:24	<i>Copyright-related Education for the Public in General. Report on Piloting in Finland.</i>
Cupore webpublications 39:25	<i>Public Awareness of the Rights. Report on Piloting in Finland.</i>
Cupore webpublications 39:26	<i>Copyright-related Education as Part of the Education of Professionals for Creative Industries. Report on Piloting in Finland.</i>
Cupore webpublications 39:27	<i>Research on Copyright-related Topics. Report on Piloting in Finland.</i>
Cupore webpublications 39:28	<i>Copyright-related Research and Study Programs in Universities and Research Institutes. Report on Piloting in Finland.</i>
Cupore webpublications 39:29	<i>Efficiency of Copyright as an Incentive to Create and Invest in Creative Works – Focus: Literature (Book Publishing Industry). Report on Piloting in Finland.</i>
Cupore webpublications 39:30	<i>Access to Copyrighted Works by the Public. Report on Piloting in Finland.</i>
Cupore webpublications 39:31	<i>Access to Copyrighted Works for Follow-on Creation.</i>
Cupore webpublications 39:32	<i>Transaction Costs in Transfer and Licensing of Rights – Focus: Literature (Book Publishing Industry). Report on Piloting in Finland.</i>
Cupore webpublications 39:33	<i>Terms for Transfer and Licensing of Rights – Focus: Literature (Book Publishing Industry). Report on Piloting in Finland.</i>
Cupore webpublications 39:34	<i>Unauthorized Use of Copyrighted Works in Physical Form. Report on Piloting in Finland.</i>
Cupore webpublications 39:35	<i>Unauthorized Use of Copyrighted Works in Digital Form. Report on Piloting in Finland.</i>
Cupore webpublications 39:36	<i>Analysis of Stakeholders’ Opinions on the Copyright System – Focus: Literature (Book Publishing Industry). Report on Piloting in Finland.</i>
Cupore webpublications 39:37	<i>Analysis of Stakeholders’ Opinions on the Copyright System – Focus: End-users. Report on Piloting in Finland.</i>