

DELIVERABLE 4.1

Report on Theoretical Framework: Media Workers' Skills and Profiles

Victor Wiard - April 2015

Part of Work Package 4:
Media workers' skills, profiles and social networks



Powered by



Media Clusters Brussels – MCB – is a collaborative and interdisciplinary research project of the Brussels Capital Region involving the three leading universities of Brussels, VUB, ULB and USL-B. The aim is to analyse the many facets of the media industry located in the Brussels Capital Region and explore the development of clusters.

The *Projet de Plan Régional de Développement Durable / Ontwerp van Gewestelijk Plan voor Duurzame Ontwikkeling for Brussels (2013)*, approved by the Brussels Regional Government on 12th December 2013, identifies the cultural and creative industries as one of the four key sectors of the metropolitan economy, and more specifically proposes a media city at Reyers as the first strategic cluster (*PôleReyers*) to develop. However, despite the fact that the Brussels Region is committed to foster the development of the media sector, there is up until now hardly any empirical data available about the structure and dynamics of the media industry in Brussels. This project aims at creating socio-economic value for the media industry in the Brussels Region and beyond by providing decision-makers with the in-depth knowledge they need regarding the media industry in Brussels while accompanying the phases of implementation of the *PôleReyers*. The overarching research question is: How can the structure and dynamics of the media sector in the Brussels metropolis be enhanced to improve its social and economic roles?

MCB is divided in six **Work Packages**. Work Package 1 offers a general overview, definitions and common framework of the project. Work Packages 2 & 3 focus on Brussels media institutions by studying Brussels' media clusters from a macro and socio economical perspective. Work Packages 4 & 5 focus on the media workers within Brussels from a micro perspective and Work Package 6 on the communities the media workers form to create interactions and communities of learning from a meso perspective. These three points of interest, media institutions, media workers and media communities, enable MCB to grasp all dynamics of media clusters in Brussels.

More information on the Media Clusters Brussels project is available on the Internet (www.mediaclusters.brussels).

The project is financed by Innoviris under the Anticipate programme (Prospective Research – Anticipate – 66 – 2014/2018).

Scope of this report

This report is dedicated to **Work Package 4** and focuses on Brussels' media workers' skills and profiles working in and around media companies identified in Work Packages 1, 2 & 3. The scope moves thus from a macro perspective to a micro, sociological interactionism perspective. The report sets the basis for the quantitative study of skills and profiles in media work with a critical perspective. The approach is transversal and aims at analysing a variety of media workers in a diversity of settings, companies, clusters and environments. As such, this part of the project proposes to fill the gap between media production and working life.

Deliverables that are built on the findings here are:

Deliverable 4.2

Deliverable 4.3

Deliverable 5.1

Deliverable 5.2

Deliverable 5.3

Key findings

Why should we study media work & media workers?

- Media workers (including their skills, profiles & social characteristics) have a strong influence on media companies, and on local well-being and economic growth.
- Understanding the needs and abilities of workers within Brussels' media structures and dynamics could enhance not only the economic potential but also the social impact of media clusters.

How can we define media workers & media professionals?

- To clarify what a media worker is it is interesting to differentiate media employees, media producers and media professionals.
- To describe such a vast domain of work, researchers have often used typologies. Media workers have therefore been described as for instance information professionals (providing qualitative or quantitative information or a mixture of both), as part of particular sectors (print, audio-visual, new media and advertising), or as task performers (artisans, creators, proprietors, critics, etc.).
- We define a media worker as any individual, working within a media company or as an independent working within at least one of the four main media sub-sectors -print, audio-visual, new media and advertising-, highly connected to other media workers and producing or facilitating the production of mediated content.

What are the most important skills for workers of media clusters?

- Skills that are relevant for workers depend on the job they have to accomplish.
- Because the production of mediated content has developed to the digital world, skills in relation with new-media, social-media, new-technology and media literacy are essential for most workers.

Depending on the jobs, a varying mix of 13 skills is seen as relevant: (1) mediated content production abilities related to the workplace, (2) multimedia production, (3) new technology mastership, (4) critical thinking, (5) time management, (6) languages mastership, (7) social-media mastership and uses, (8) ability to work with others, (9) multitasking, (10) enterprising, (11) communication skills and customer support, (12) software and computer skills, (13) technical skills.

Media Clusters Brussels: DELIVERABLE 4.1

Report on Theoretical Framework: Media Workers' Skills and Profiles

Why bring profiles in the mix?

- Profiles are the main socio-economic characteristics of media workers.
- They encompass characteristics such as age and gender, as well as training, employment, or income.
- Comparing profiles and skills of media workers in Brussels will allow us to foresee employment as well skills mismatch, to improve media clusters dynamics.

How do we study their profiles and skills?

- Through a quantitative survey given to media workers of at least 9 companies of different sizes within each identified cluster.
 - The questionnaire should include themes such as general information, training, career, daily tasks and routines, workplaces, links to others employees within and across companies, as well as goals and aspirations.
-

Table of contents

Scope of this report	3
Key findings	4
Table of contents	6
Introduction	7
Part 1: What are media workers?	9
Media producers, professionals and workers	9
A triple distinction	12
Towards a typology of media workers	14
An integrated typology for the study of media workers.....	17
Part 2: Media Workers' Skills and Profiles	19
The many skills of today's labour force	19
Skills to look for	21
Socio-economic characteristics as a tool for profiling.....	23
Characteristics for media workers in Brussels.....	24
Part 3: Conclusion and Future Research	25
Using a quantitative survey to gather data	26
From the literature review towards the 7ps.....	28
Where do we go from here?.....	29
Appendix: References	31

Introduction

As for the rest of this research project, work packages 4 & 5 are dedicated to study media clusters in Brussels Capital Region. However, to get more comprehensive data, the two work packages operate a shift of attention from a macro-economical perspective on media institutions, considering media companies as relevant entities, to a **micro-sociological analysis of media production** making the **individuals producing media and their interactions the primary focus**.

Media producers are at the heart of clustered media companies. They are often described as **the beneficiaries of clusters through the concept of inter-firm mobility and as a key benefit for companies willing to establish themselves within clusters through the establishment of a common pool of workers**. On one hand, Inter-firm mobility shows how clusters in some industries, such as high-technology firms in Silicon Valley provide jobs opportunities for workers (Casper, 2007). On the other hand, and at a higher level, media companies benefit from clusters and gain stability through the creation of a common pool of media workers which answer their (temporary or long term) needs in workforce (Karlsson& Picard, 2011). The presence of this pool of workers is particularly helpful for media companies relying on temporary contracted labour available for project-based activities. Finally, companies and clusters also participate in collaboration and cooperation processes between workers within and across firms; demonstrating that "cool' projects, indeed, rely on 'boring' institutions" (Grabher, 2002, p.212). By learning more about media workers in Brussels, one will gain knowledge not only about these important phenomena, but also on the social and urban issues at stake for media clusters in Brussels (Chesnel et al., 2013). However, we know very little about media workers within the city. Previous research includes national or community oriented research on journalists and other professions, but rarely focuses on the city as a distinct entity and does not approach media workers in a transversal manner.

In *The Business of Culture*, Lampel, Shamsie&Lant(2006) explain that entertainment and media have been classified as part of the "cultural industries" (2006, pp.4-6). For them, the cultural industry, which brings together the cultural and the industrial -and the economical-, can hence be defined as "systems of production, distribution and marketing that deliver products to consumers, where each cultural industry is made up of firms that specialize in the production and marketing of specific cultural products and is sustained by consumer demand for these products" (Lampel, Shamsie, &Lant 2006, p.6). However, most considerations of these productivity interpretations in cluster theory and other types of economic perspectives are not singularly distant from objects of studies and research questions asked in the sociology of media and the

study of media workers. In recent years, applied and fundamental research over the division of labour (or the sociological analysis of work and workers on a macro scale) has evolved. Terms such as sectors (Hesmondhalgh & Baker, 2013; Mosco, 2006; Storey et al., 2005; Hess & von Walter, 2009) and industries (Kong, 2014; Lampel, Shamsie, and Lant 2006) or clusters and quarters (Karlsson & Picard, 2011) have shadowed if not replaced the notion of professions (Abbott 1988). This lexical evolution exemplifies a certain **neo-liberalisation of the industries, including the media, cultural and creative industries** as well as the recent translation of media and other former social institutions into a **market economy** (Hallin, 2008). This observation is true, at least partly, within Brussels media environment. In this regard, Miller (2011) notes that: "Today, the expression division of labour is used to describe sectoral differences in an economy, the occupations and skills of a labour force, and the organization of tasks within a firm" (Miller, 2011, p.87).

In this context of "informational hypercapitalism" (Deuze, 2007, p.10), media workers do not have the choice but to accept a high degree of autonomy, independence and ability to adapt to change (Deuze, 2007); changes of companies (accompanied with bosses and co-workers as well as habits and situation), changes in contracts (as well as salaries, working conditions, schedules, location and mobility), and changes in overall practices, habits and life brought by the evolution of the market, technologies and society. Within work-based economical structures (whether we call them companies, clusters, sectors, or industries), **researchers have shown the strong dependency between local economic well-being and the workers themselves**. In the new technology industries, for example, labour mobility (between firms) and social networks can lead to economical regional development (Casper, 2007). Picard also states that clusters provide flexibility, social networks, interactions and interconnections, a common skilled labour pool, and the rapid diffusion of knowledge and ideas (Karlsson & Picard, 2011, pp.5-6), and implies that it fosters economic growth.

In 2012, a report produced around the General State of News Media in the Wallonia-Brussels Federation argued that the "race for the stacking of skills and required tasks" is one of the main concerns for journalists. Journalists do not only need to **have a variety of skills but also the evolution of their professional trajectories will most likely require them to acquire new ones**. Moreover, the "Internet Economy" and "social networking sites" force them to adapt to new production tools and calls for contributions of non-journalists within media institutions (Parlement de la fédération Wallonie-Bruxelles, 2012, pp.161-165). One of the report's recommendations (recommendation 27) suggests improving the climate within newsrooms by operating a diversification (of age, gender, origin, culture and training) of news teams, which will in terms improve skills and approaches to information (Idem, p.180).

However, in order to diversify media workers' (such as journalists) profiles and to improve their skills, data on the status of skills and profiles is necessary. Hence the goal for this report is: **Define media workers, find out the different types of workers existing (by building a typology), and build a quantitative report on their profiles and skills.**

In order to provide a first comprehensive and transversal study of workers producing media content in Brussels the report is divided in three sections. In Part 1, we propose to establish an operational definition of media producers, workers and professionals in reference to mediated content production (as established by Deliverable 1.1). Additionally, we outline an integrated typology for the classification of media workers in Brussels. Part 2 explains what is meant by skills and profiles of media workers and we can learn from previous quantitative studies. In Part 3, a more concrete outline of the methodology used to gather data on media workers' skills and profiles is given. It mainly introduces the quantitative questionnaire being drafted and outlines future research.

Part 1: What are media workers?

Media producers, professionals and workers

There are various approaches to delineate media workers. Based on the findings of Work Package 1, the project MCB focuses on the individuals who produce mediated content, as it is content production that has been chosen as the core (see Deliverable 1.1a): "Media is defined as activities directly or indirectly supporting the process from production to consumption of mediated content as the core that can be differentiated into entities of four key sectors, (1) print, (2) audio-visual, (3) new media and (4) advertising" (Deliverable 1.1a). At this level of analysis, the focus therefore shifts towards individuals participating in the processes and mechanisms of mediated content production, within the four key sectors. However, the literature shows that there is a diversity of individuals producing mediated content: ranging from amateurs producing content in their free time to trained professionals working full-time on content production. To understand this diversity better, we propose to distinguish three partially overlapping categories related to mediated content: **media producers (anyone producing media not necessarily as a source of revenue), media professionals (producing mediated content as a source of revenue) and media workers (working in media companies but not necessarily producing content).**

What is **work** varies depending on temporal, spatial and cultural conditions because it is an activity that tends to be performed in various social situations

(Grint, 2005). Even so, it can be perceived as a goal in itself, and depends on the economy and various external factors (Idem, 2005), to the extent that in modern days, work “dominates our thinking about life” (Deuze, 2007, p.1) and that people seek education and training to access a certain profession, or enhance the amount of time or energy spent at work to be able to get another job. Because of the complexity of this context, it seems a useful and pragmatic simplification, to define **media workers as workers producing mediated content**, and within the new media ecosystem where digital production techniques seem to challenge former processes of media production (Kallinikos&Mariátegui, 2011). Having said this, all **media producers** in these ecosystems do not work within media companies or even make money out of media production, as in the rise of amateur media production (Hunter et al., 2012). Numerous media workers work within media firms and media companies (Picard, 2002; 2014). However, not all workers of media companies (which we can call media employees) produce mediated content: managers handle the producers themselves (see Deuze, 2011) while another group of workers takes care of the logistics, the infrastructures and other operations allowing for the production and circulation of the content.

Shedding light on another side of media workers (after production and employment) is the concept of profession. **A profession is defined as group applying a certain set of particular knowledge to common work related occupations** (Abbott, 1988, p.8). An occupation becomes a profession when there is a relatively long and established intellectual education, adherence to peculiar practices and claims by practitioners that the occupation is indeed a profession (Volti, 2008; Abbott, 1988; Bollinger &Hohl, 1981; Asheim, 1979). Professions usually contain six main criteria: disposing of specialized knowledge, a formal education, a code of ethics, common standards, and a certain autonomy (Volti 2008). Researchers have shown the many processes enabling occupations to evolve into a profession such for librarians (Asheim, 1979) or even vice versa (Bollinger &Hohl, 1981). Although scholars do not agree on what separates an occupation from a profession, the general consensus dictates that an occupation becomes a profession when there is a relatively long and established intellectual education, adherence to peculiar practices and claims by practitioners that the occupation is indeed a profession (Volti, 2008; Abbott, 1988; Bollinger &Hohl, 1981; Asheim, 1979).The recent technical, technological and social developments in mediated communication and content production plead by themselves for the conceptualization and the study of a new group: media professionals. **Volti's six criteria could be applied to media production** (2008, 97–100):

- (1) The first criterion is the possession of a specialized knowledge, which could be demonstrated in our case by the workers knowledge in the media industry, its socio-economy, as well as social skills (in terms of

- communication) and technical skills (to use the ever-developing new technologies).
- (2) The second characteristic of professions, which is having a formal instruction such as university programs, is essential in Belgium's media ecosystem, with departments and degrees in Communication and Journalism.
 - (3) As a third characteristic, the work of professionals must be of great value to society and people requiring the professionals' services. If this is harder to prove with facts and numbers for Brussels, it has been demonstrated that media professionals are providing services to society. It has been shown, for example, that journalism as a specific media profession performs four particular roles: a monitoring role – informing individuals –, a facilitative role – aiding democracy –, a collaborative role – with society and institutions –, and a critical role – challenging authority (McQuail, 2006, pp.55–56).
 - (4) The fourth characteristic of a profession as established by Volti focuses on the power brought by specialized knowledge. Volti opposes commercial relationships to relationships between professionals and clients, in which professionals must answer the needs of the client and the client trusts the professional. This leads to the existence of codes of ethics. Journalists as well as other media workers have codes of ethics developed for sub-professions as well as within media organizations.
 - (5) The fifth criterion states that professionals develop a peculiar relation not only with customers but also with other members of the profession. They must interact and develop common accepted standards to the profession (which can also be found in codes of ethics). In Brussels (and Belgium) multiple professional associations exist, such as the Belgian Public Relations Consultants Association (BPRCA, <http://bprca.be/>) or the Association Belge de la Communication Interne (ABCI, <http://www.abci.org/>). Relationships amongst professionals are thus not only based on competition but also on cooperation.
 - (6) Finally, the sixth and final characteristic puts the idea forward that workers of a profession must be autonomous and have a certain degree of self-governance. In this regard, the profession of a media expert is not bound (yet) by legislation, making the definition of a media professional more complex. In the case of journalists, a press card exists in Belgium and Brussels but is neither compulsory nor exclusive.

Even if some of the criteria (specialized knowledge, formal education, value to society and individuals, ethics, common standards, autonomy) seem hard to operationalize, – and empirically prove them is not the main object of this report –, the checklist approach to professions (Volti, 2008, p.97) shows that **media**

workers and journalists could be regarded as a professional group. In spite of this, media companies are under pressure due to structural changes in the industry. The arrival of new technologies and new players in media production has pushed media companies to outsource work by signing project-based contracts, using student-interns as well as freelancers (Storey et al., 2005). The rise of non-standard work contracts for media workers bringing low rewards for high efforts has many effects on workers, including stress (Ertel et al., 2005).

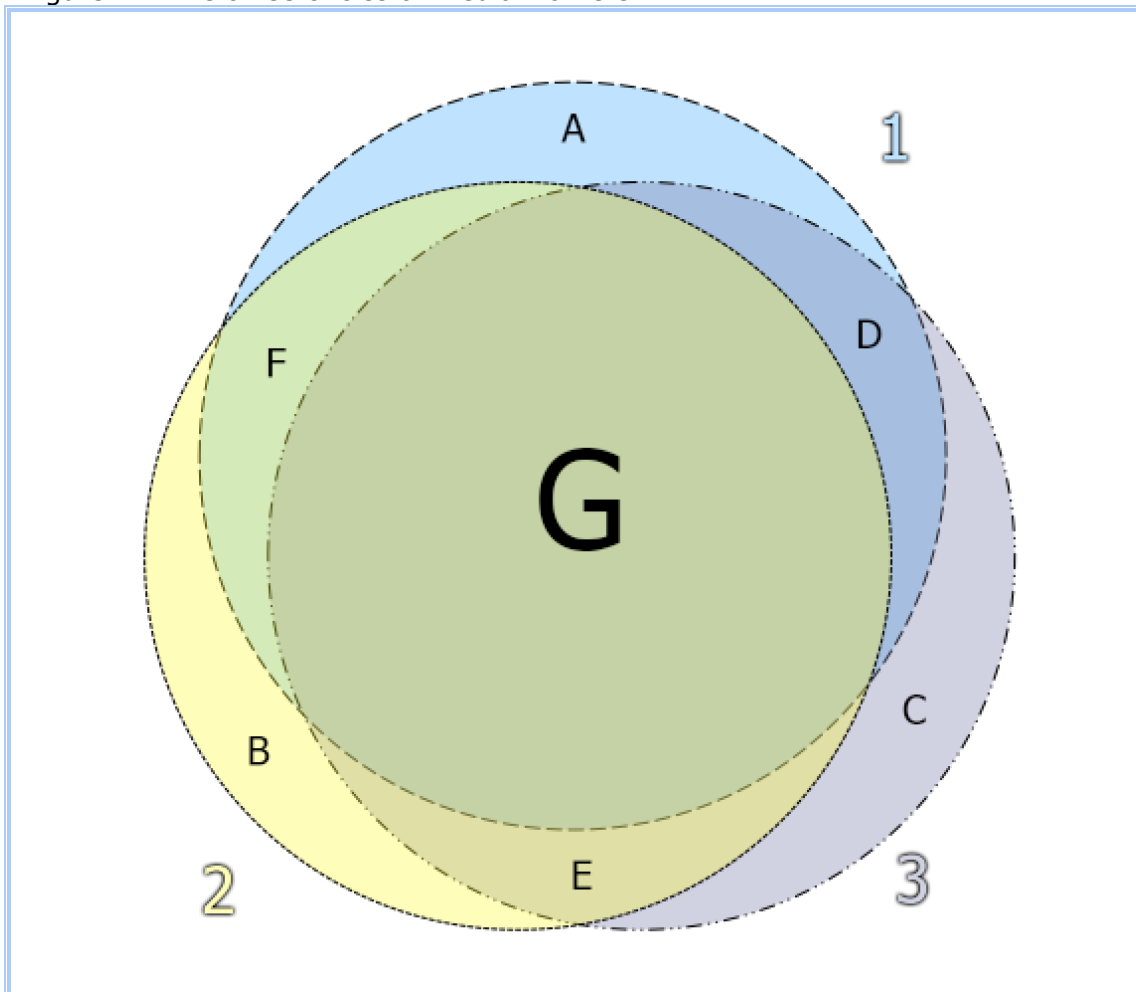
A triple distinction

We have argued that media work is a versatile term that can refer to a diversity of individuals: from the professional journalist writing news articles online, to the chauffeur distributing the paper, from the creatives at advertising companies, to managers of web-based applications, from professional web designers to local amateur bloggers. For this project, we chose to define media workers as follows:

"Media workers are individuals, working within a media company or producing content related to at least one of the four main media sub-sectors – print, audio-visual, new media and advertising –, highly connected to other media workers and producing or facilitating the production of mediated content."

Media workers can be part of (at least) one of three categories: **media producers, media professionals and media companies' employees.** Figure 1 shows this triple distinction:

Figure 1 – The three circles of media workers.



In this context, and based on previous observations we argue that in order to account for this variety of actors, a triple distinction amongst individuals who work in and around media is necessary: media producers, media employees, and media professionals. We propose to distinguish them as partially overlapping groups (see Figure 1):

- (1) **Employees** as the individuals working in media companies (as identified in work packages 2 and 3).
- (2) **Producers** as anyone producing media content.
- (3) **Professionals** as the individuals producing media content as a primary source of revenue.

This partial overlapping of categories leads to 7 new sub-categories:

- **(A)** Group A is made of media employees working in one of the four sub-sectors identified in Deliverable 1.1a who are not media producers (2) nor

media professionals (3) such as employees in charge of maintenance or infrastructure.

- (B) Group B is made of producers who are not employees (1), nor professionals (3). It is the case for example of amateur bloggers or audio visual producers (e.g. YouTube).
- (C) Group C represents the professionals who are not media employees (1) or producing media (2) such as former journalists who are still involved in the media ecosystem but do not work for a media company or produce content.
- (D) Group D regroups the employees who are professionals who are not producing media content (1 & 3 but not 2), mainly managers or other media professionals working in media companies without being involved directly in content production.
- (E) Group E represents the professionals who are producing content without being employees (2 & 3 not 1); this category accounts for the freelancers and other independent consultants.
- (F) Group F shows the employed producers who are not professionals (1 & 2 not 3) such as employees in companies producing content without formal training or assignment.
- (G) Finally, group G encompasses the media workers who are professionals and produce content within media companies (1, 2 & 3). We assume that the majority of media workers.¹

Towards a typology of media workers

The definition of media workers and their three dimensions (professionals, producers and employees) already delineated the scope of the analysis of media workers. However, it is necessary to structure media workers within Brussels' media ecosystem within and across clusters. To interpret this in-depth, we dress a quick panorama of typologies in order to delineate our own proposition in the coming section.

MEDIA WORKERS AS INFORMATION PROFESSIONALS

In the late 80's, Abbot already empirically examines a profession – or more accurately a group of professions –, which relates to media workers: “the information professions” (1988, pp.215-246). Based on his observations of the professions existing at the time, **Abbott proposes to classify professions**

¹The verification of that will be one aim of the future reports of Work Package 4

according to three categories: qualitative task's area, quantitative task's area, and the combined jurisdiction. Thus Abbott separates professionals according to the type of information they process. He argued that qualitative information professionals provide information aimed at being a basis for action. Their main help focuses on making information usable. Librarians, academics, advertisers, journalists, etc. produce qualitative information. Accountants, managers, statisticians, systems analysts, etc. provide quantitative information (1988, pp.216-217).

Though the thought that not all information (and not all media) is equal is interesting, this pre-computers and pre-Internet division does not cope with the reality of the new digital age. What is more fascinating is that this distinction seems to still highlight an existing separation within media companies (especially within press/information outlets and in advertising outlets) between the content producers (journalists and creative) and sales (marketing, account management, etc.).

MEDIA WORKERS WITHIN MEDIA SECTORS

We have defined above media workers as individuals working within media companies. Regarding workers, and in a sociological perspective, Deuze (2007, 2010) shows that we are living in an age where media is everywhere in our everyday life (as a material object as well as a technology) and thus as well, in our working lives. He describes media work as having a changing nature, and **media workers' professional identities as shaped by the organisation of work.** He investigates media professionals in a sector-divided way, which he describes as "four key media professions": (1) advertising, public relations and marketing communication, (2) journalism, (3) film and television production; and (4) game design and development (Deuze, 2007). He justifies this classification by stating that these 4 professions are all part of cultural products' production. This concurs with Karlsson& Picard's (2011) classification. For Karlsson& Picard, this production includes three types of business activities: the production and distribution entertainment, the production and distribution of information, and the sale of advertisements (Karlsson& Picard 2011, p.3). The researchers assert that media clusters and industries are said to encompass: advertising, television, film, music, computer games and newspaper sectors. They state that the music industry is not always incorporated in any media cluster (accept when video production or design services are part of the company) and that game production likes to cluster near software production as part of ICT clusters (Karlsson& Picard 2011, p.11).

Adding to this, Deliverable 1.1 has shown that media sectors are already made of countless sub-sectors and that convergence processes have broken the traditional division of media. Because there is no consensus on the definition and because of

the many reasons stated in the Deliverable, the natural decision was to follow its classification, hence dividing mediated content production in 4 main sectors as follow: (1) print, (2) audio visual, (3) new media, and (4) advertising sector.

MEDIA WORKERS AS TASK PERFORMERS

Current scholars have tried to overcome these boundaries – useful classification tools for research but artificial nonetheless –, to create new typologies of media workers. Using a department approach to study media outlets, Westlund (2011) has argued that there are three different departments within media outlets: Editorial, Business and I.T. Away from Deuze's (2007) sectorial considerations, Westlund results argue for the existence of three types of media workers which he names: the techies, the creatives and the suits. Moreover, he defends the idea that we should study the three types of media workers together, but as connected (Westlund, 2011). For Miller (2011), what has been called **media work should be regarded as individuals performing a task** (or more accurately an accumulation of very different tasks) leading to the production of media, which includes but must not be limited to media content (Miller, 2011). Tasks in the media industry involve (at least) the production of one of four distinct elements: content, connectivity, creativity and commerce (Deuze, 2009). Miller (2011) then proposes that within those sectors evolve particular overlapping groups of workers as follow: (1) Creators making new art and ideas, such as musicians, directors, writers and journalists, web designers, technical workers; (2) Artisans whocommunicate the art/ideas of others and provide infrastructural services as sound engineers, editors, cinematographers, carpenters, electricians; (3) Impresarios who connect proprietors to creators; (4) Proprietors and executives controlling employment and investment; (5) Critics creating new interpretations; And (6) audiences whose labour pays for content and give meaning.

These social groups operate within very specific institutional contexts: private bureaucracies controlling investment and distribution, public bureaucracies offering what capitalism cannot, small businesses run by charismatic individuals, but also across network of fluid associations formed to undertake specific projects (Miller, 2011).

MEDIA WORKERS AND ACTOR-NETWORK THEORY

Recent literature on clusters has shown that agglomeration of companies generates a common pool of skilled labour (Karlsson& Picard, 2011) and fosters inter-firm mobility (Casper, 2007). However most analyses of clusters are economical and tend to leave aside the social matters (Chesnel et al., 2013); they do not take into account the importance of the social dimension within them

(Zarlenga, Rius& Rodríguez, 2013). Adding on Work Package 6 and social research on the communities of practice, this research on media workers aims to look at some of **the sociological consequences of firm agglomeration, which encompasses interactions and interconnections amongst workers.** To do so, the so-called Actor-Network Theory (ANT) is seen a relevant tool for the analysis of socio-technical networks (Law, 1992; Latour, 1996, 2005; Lee & Hassard, 1999) and will be used to analyse the ties between workers, as well as with firms, public places, and the city itself. ANT let us look at social groups and groupings from an inductive perspective and allows for the study of inter-firm collaboration and cooperation, seen as an important aspect of spatial agglomeration (Grabher, 2002,p.212).

An integrated typology for the study of media workers

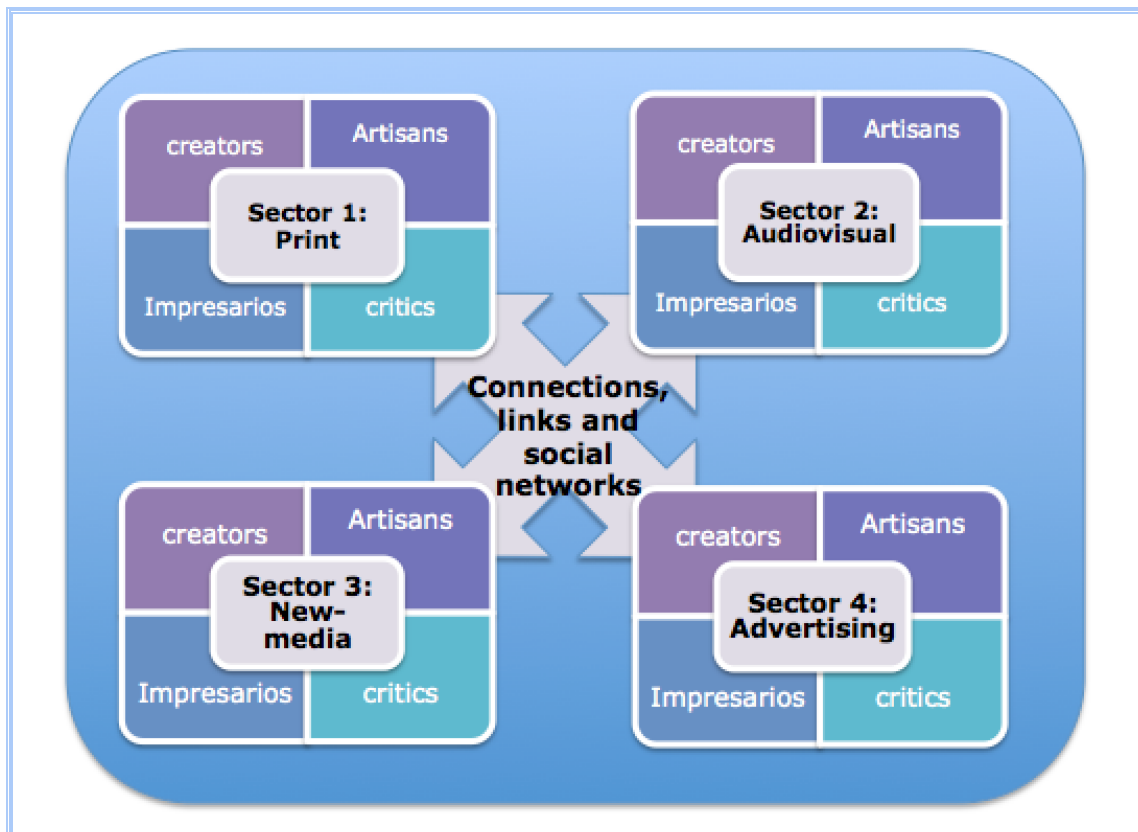
The three types of typologies mentioned above provide a solid point of departure as of **how the media sector is structured.** The first typologies observed show that there are different types of media content produced on a day to day basis by media workers. The second shows the variety of industries and sectors that focus on media production. The third tell us that amongst media companies, a variety of tasks are being performed, making each worker different. Finally, actor-network theory show us that it is possible to study how workers are connected together, to their work spaces, to institutions, etc.

However, most approaches **lack comprehensiveness when trying to study media workers within clusters in a transversal manner.** Typologies focus on media sub-sectors such as Deuze's (2007) approach fails to grasp the diversity of tasks, jobs, and lives. On the other hand, works focusing on professions, jobs and tasks lack generalization to the peculiarities of sub-sectors making up media clusters. Building on the three typologies explored and integrating elements from actor-network theory, it is now possible to create a new typology for the analysis of media workers within media clusters (see Figure 2).

Figure 2 - General Typology of media workers as to be applied in Brussels.

Media Clusters Brussels: DELIVERABLE 4.1

Report on Theoretical Framework: Media Workers' Skills and Profiles



The new typology integrates media workers, within the four media sectors (see Deliverable 1.1a), and takes into account the tasks they perform as main tool to distinguish media professionals, media employees and other individuals among them (Westlund 2011; Miller 2011). Actor-network theory will help to shed light on the links and networks of workers and how they are connected, helping Work Packages 2 & 3 to establish connectedness within and across firms (consistent with the idea of clusters theory that connectedness enhances clusters dynamics).

Table 1 – Delineating media workers.

Media workers (including their skills, profiles & social characteristics) have a strong influence on media companies, and on local well-being and economic growth.

- Understanding the needs and abilities of workers within Brussels' media structures and dynamics could enhance not only the economic potential but also the social impact of media clusters.

To clarify what a media worker is it is interesting to differentiate media employees, media producers and media professionals.

- To describe such a vast domain of work, researchers have often used typologies. Media workers have therefore been described as for instance information professionals (providing qualitative or quantitative information or a mixture of both), as part of particular sectors (print, audio-visual, new media and advertising), or as task performers (artisans, creators, proprietors, critics, etc.).

We define a media worker as any individual, working within a media company or as an independent working within at least one of the four main media sub-sectors -print, audio-visual, new media and advertising-, highly connected to other media workers and producing or facilitating the production of mediated content.

Part 2: Media Workers' Skills and Profiles

The many skills of today's labour force

Skills can be understood as any ability to perform a task, an operation that is learned over time through three main stages: declarative stage, knowledge compilation and the procedural stage (Anderson, 1982). Regarding media workers, the production of mediated content — may it be informational or cultural — challenges our definition of work as it requires intellectual, technical and entrepreneurial skills (Lazzarato, 1996).

The evolution of technologies in immaterial labour increasingly brought new technical and intellectual skills in big companies in the tertiary sector, including "cybernetics and computer control" (idem, 1996). More recently, it has been argued that "immaterialization of media production" processes brought by media convergence **have turned the tables from the importance of people and machines to skills, values and ideas** (Deuze, 2009, p.474). In 2012, the UK

commission for employment and skills investigated skills in a wide quantitative study. The results led to the conclusion that even though creative media and entertainment is a sector with high proportion of highly educated people with a high average income, there are still job vacancies due to skill mismatch and skill shortage. They highlight the great need of STEM (science, technology, engineering and math) skills in the sector especially oriented towards the use and mastership of new technologies (Creative Skillset and Creative Cultural skills, 2012).

However, It is relevant to note that skills useful in companies depend on the position held by the employee. In the creative and cultural industries, **predominant skills required can be divided in 4 broad occupational groups:** (1) managers with transferable leadership and managerial skills; (2) professionals with technical skills and communication or customer service skills; (3) associate professionals (technicians) with technical skills and technical support abilities; (4) skilled traders with job specific and technical skills; and (4) personal servicers with technical skills within communication or customer service (Creative Skillset and Creative Cultural skills, 2012). At the managerial level, the concept of High Performance Working is seen as way to improve employees' management skills. It is believed that it will in turn benefit individuals, employers, government and society (Bates & al., 2009). It is defined as "a general approach to managing organisations (including HR practices, work organisation, management and leadership) that aims to stimulate more effective employee involvement and commitment to achieve high levels of performance."

At the level of professionals, and taking the example of media convergence and news Huang et al. (2006) show the importance of being able to do multimedia production in today's environment. **They underline 9 skills necessary for news professionals:** (1) good writing, (2) multimedia production, (3) new technology, (4) computer-assisted reporting, (5) visual production, (6) critical thinking, (7) time management, (8) second language and (9) on-camera exposure (Huang et al., 2006, p.91). To answer questions related to society's current convergence processes (Jenkins, 2006), an emphasis will within the skills of media workers be put on adaptation skills related to multimedia and social-media production and management as they are now seen as key skills for employers of the sector, such as for journalism companies. In their study, Wenger & Owens (2012) equally identify comparable skills, e.g. strong writing, web/multimedia skills, ability to work under pressure or with tight deadlines, being a team player, multitasking, enterprising, communication skills, or software and computer skills. As this project intends not only to look at media workers' current situation but also at future workers' educational needs', skills workers have and skills needed will be the two main topics within this Work Package.

Skills to look for

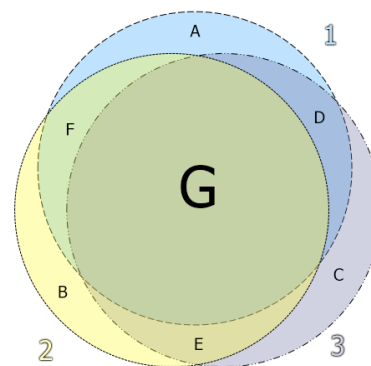
Stemming from current research and trends and based on the definition built before, we propose to focus on detecting the relative mastery of the following skills:

- 1. Mediated content production abilities related to the work position,**
- 2. Multimedia production,**
- 3. Adaptability to innovations,**
- 4. Critical thinking,**
- 5. Time management,**
- 6. Languages mastery,**
- 7. Social-media mastery and uses,**
- 8. Ability to work with others,**
- 9. Multitasking,**
- 10. Enterprising,**
- 11. Communication skills and customer support,**
- 12. Software and computer skills,**
- 13. Technical skills.**

Because little is known so far about what skills do media workers in Brussels have, the adequacy between skills and tasks performed will be the object of a close analysis. Following the existing literature, we therefore propose to evaluate the possession of the 12 skills across all types of media workers to evaluate skills mismatch, focusing on relevant skills for each position held in the media ecosystem (see Table 2):

Table 2 – The many dimensions of media institutions.

Position in the circle	A: Employees working in one of the four sub-sectors who are not media producers or media professionals.	B: Producers who are not employees, or professionals.	C: Professionals who are not media employees or producing media.	D: Employees & professionals, not producing media content.	E: Professionals producing content without being employees.	F: Employees producing who are not professionals.	G: Media workers who are professionals and produce content within media companies.
Type of jobs in media sectors	- Technicians - Logistics - Infrastructure - maintenance - Administrative	- Amateurs - Fans - Pastime	- Consultants - Teachers - Formatters	- Managers -HR	- Independents - Freelancers - Contract-based technicians	- Employees writing press release - Employees non-professionals	- Journalists - Advertisers -Creatives - Filmmakers
Skills deemed the most relevant	-Time management -Group work - Multitasking -Communication -Technical	- Production - Multimedia - New techs - Critical thinking - Time management - Socialmedia - Multitasking - Enterprising - Software/ computer -Technical	- New techs - Critical thinking - Time management - Languages - Socialmedia - Enterprising	- New techs - Critical thinking - Time management - Languages -Group work - Multitasking - Enterprising -Communication	- Production - Multimedia - New techs - Critical thinking -Time management - Languages - Software/ computer -Technical	- Production - Multimedia - New techs - Critical thinking - Time management - Languages - Social media - Group work - Enterprising -Communication - Software/ computer -Technical	- Production - Multimedia - New techs - Critical thinking - Time management - Languages -Group work - Multitasking - Enterprising - Communication - Software/ computer - Technical



Socio-economic characteristics as a tool for profiling

Profiles can be understood as descriptions of media workers main characteristics, including but not limited to their skills as described above. Naturally, the various profiles of media workers can then be characterized by the sector they are working in (Deuze, 2007; Deliverable 1.1a), the task they perform (Miller, 2011), the network they interact with and relates to the content they produce, and the skills they possess (Creative Skillset & Creative Cultural Skills, 2012). However, this is only one side of the matter. Over the years, quantitative studies and surveys have used **the concept of demographic profiles to understand the links between individuals' characteristics** (e.g. age, gender, ethnicity, socio-economic backgrounds, labour condition, employment or training) and their working situation to understand trends within particular segments of the population.

In this regard, national and international **surveys focusing on journalists** provide a good basis on what a general media workers' oriented socio-economic profile should contain (Quandt et al., 2006; Raeymaeckers et al., 2013; Weaver et al., 2006). Main topics and sections of journalist surveys on profiles are basic characteristics (age, gender, familial situation, work position, salary); education and training, workplace related data; professionalism (roles, values and ethics); links to technology and the Internet; minority and gender issues in the workplace.

Regarding socio-economic characteristics, the **Creative Skillset and Cultural Creative Skills Media workforce survey (2010) seems to have comprehensive categories**: profile of respondent (employment, gender, age, disability, ethnic and national origins, marital status, dependent children, location of work and residence) and working patterns and career progression (recruitment to current job or most recent job, year of entry, income, working days and week, unpaid working and future career plans).

Other surveys in social science research also provide a good basis on what to look at when it comes to socio-economic-cultural characteristics. It is the case of the **European Social Survey** —or ESS. Topics chosen for their profiling are: Respondent and household demographic characteristics; education of respondent, children (and partner); racial/ethnic origin; work status and unemployment experience of respondent (and partner); occupation and SES of respondent (and partner); economic standing/income of household; subjective health status of respondent; social trust and networks; subjective indicators of poverty; experience and fear of crime; access to and use of mass media (European Social Survey, 2001; Erikson & Jonsson, 2001).

Characteristics for media workers in Brussels

Building on the questionnaires studied and keeping in mind the object of the research, we have constructed a panorama of the socio-economic characteristics relevant for the project. As work is the main focus of this part of the research project, **we have decided to divide profiles in two main categories: personal life characteristics and employment/work characteristics.** These two categories will help establish trends to which skills' possession and needs will then be compared. Again, because there is very little information regarding media workers in Brussels in a transversal manner, we tried to keep categories as open as possible (see Table 3).

Table 3 – Characteristics of media workers.

1. General profile of respondents	2. Working patterns and career progression
<ul style="list-style-type: none"> • Gender • Age • Subjective health status • Ethnic / national origin • Marital status • Dependent children • Location of residence 	<ul style="list-style-type: none"> <input type="checkbox"/> location of work <input type="checkbox"/> income <input type="checkbox"/> training <input type="checkbox"/> use of media in work <input type="checkbox"/> recruitment to current job or most recent job <input type="checkbox"/> year of entry <input type="checkbox"/> income <input type="checkbox"/> working days and week <input type="checkbox"/> unpaid working <input type="checkbox"/> future career plans <input type="checkbox"/> working tasks (for the typology)

Cross sector, tasks and socio-demographic analysis of profiles and skills will allow for a transversal presentation of media workers in the city. Getting a complete picture of where media workers come from by detecting trends in characteristics will help give a complete picture at why some skills are missing within particular sectors and companies (skills mismatch), and how we can advance to teach them.²

² Diversifying the area of questions related to those topics as well as preliminary interviews to make sure which ones matter the most will allow for the detection of more variables related to media workers' profiles.

Table 4 – The skills and profiles of media workers.

Skills that are relevant for workers depend on the job they have to accomplish.

- Because the production of mediated content has developed to the digital world, skills in relation with new-media, social-media, new-technology and media literacy are essential for most workers.
- Depending on the jobs, a varying mix of 13 skills is seen as relevant: (1) mediated content production abilities related to the workplace, (2) multimedia production, (3) new technology mastership, (4) critical thinking, (5) time management, (6) languages mastership, (7) social-media mastership and uses, (8) ability to work with others, (9) multitasking, (10) enterprising, (11) communication skills and customer support, (12) software and computer skills, (13) technical skills.

Profiles are the main socio-economic characteristics of media workers.

- They encompass characteristics such as age and gender, as well as training, employment, or income.
- Comparing profiles and skills of media workers in Brussels will allow us to foresee employment as well skills mismatch, to improve media clusters dynamics.

Part 3: Conclusion and Future Research

Statistics from the government of the region of Brussels shows that a little less than 700.000 individuals work in Brussels, of which 640.000 work in the tertiary sector (providing services, as opposed to the two other sectors, providing raw material or goods). Preliminary on the ground observations in key areas of Brussels, as well as general reports (see IDEA Consult, 2012) show the presence of media companies producing mediated content in the city and, therefore, media workers. Yet, one has to know where exactly those workers work and live (in Brussels Capital Region or Flanders and Wallonia).

As problematized above, the very categorization and inclusion/exclusion process of media work and media workers tends to prove difficult. However, using the new triple definition created, partial estimations can be produced using databases and reports existing. Even if these numbers have to be taken carefully, they do give an idea of the magnitude of which we are working with. We therefore propose to **use statistics and estimates from various sources to draw a**

census of media workers in the city. We propose to use databases from regional institutions (e.g. BISA, Brussels Institute for Statistics and Analysis), national institutions (Statbel, Statistics Belgium), private companies (Bel-first) as well as international workers and companies' classifications (mainly the NACE classification and ISCO classification of occupations). This census will serve as the basic population for the quantitative study. This will in terms allow evaluating the representativeness of the questionnaire, from which a sample of workers will be drawn. Moreover, because this research focuses on media clusters within the city of Brussels, we have decided to focus the census of media workers on the clusters detected in Work Packages 1, 2 and 3.

Table 5 – The methods to analyse media workers' skills and profiles.

Media workers' skills and profiles are analysed through a quantitative survey given to media workers within each identified cluster.

- The questionnaire should include themes such as general information, training, career, daily tasks and routines, workplaces, links to others employees within and across companies, as well as goals and aspirations.

Using a quantitative survey to gather data

Throughout the world, various empirical works have used quantitative questionnaire to gather data on media workers (Creative Skillset and Cultural Creative Skills, 2012; 2014; Raeymaeckers et al., 2013). Methodological manuals exist to help building quantitative questionnaires (Creswell, 2013; Newman, 1998; Jensen, 2002). The goal of constructing a survey is to write questions that can be translated into the needed variables to answer the questions developed. As mentioned before, **the questionnaire must focus on answering three main objectives:** establishing the workers' profiles in terms of socio-economic characteristics and employment, detecting the workers skills (in possession and in need), and finding the individual's position within the media workers circle and the typology created above. A fourth objective is to collaborate and provide data for other Work Packages of this project. A fourth section will then be added in the questionnaire to answer questions related to workers' mobility and attachment (Work Package 5), as well as to workers' companies (Work Package 2 and 3) and their communities of practice (Work Package 6). The answers to the questionnaires will be computed and analysed in a descriptive manner (however, we do not exclude hypothesis testing in case we deem the census precise enough to establish the sample's representativeness). Table 6 gives a summary of the questionnaire main objectives, and its consequent themes and categories (to be transformed into computable questions and answers).

Table 6 – The main objectives of the questionnaire.

Objective I: Establish media workers' profiles	
1. General profile of respondents	2. Working patterns and career progression
Gender Age Subjective health status Ethnic and national origin Marital status Dependent children Location residence	<input type="checkbox"/> location of work <input type="checkbox"/> income <input type="checkbox"/> training <input type="checkbox"/> use of media in work <input type="checkbox"/> recruitment to current job or most recent job <input type="checkbox"/> year of entry <input type="checkbox"/> income <input type="checkbox"/> working days and week <input type="checkbox"/> unpaid working <input type="checkbox"/> future career plans <input type="checkbox"/> working tasks (for the typology)
Objective II: studying media workers' skills	
3. Skills of the workers	4. Skills considered as missing
<ul style="list-style-type: none"> • Mediated content production abilities related to the workplace <ul style="list-style-type: none"> • Multimedia production • New technology mastership <ul style="list-style-type: none"> • Critical thinking • Time management • Languages mastership • Social-media mastership and uses <ul style="list-style-type: none"> • Ability to work with others <ul style="list-style-type: none"> • Multitasking • Enterprising • Communication skills and customer support <ul style="list-style-type: none"> • Software and computer skills <ul style="list-style-type: none"> • Technical skills 	
Objective III: Finding out media workers position in the circle ad typology	
5. Crossing data from general profiles (1) + career progression (2) + subsidiary questions	
Type of employment (independent, employee, unemployed, student) Professionalism (degree of training, part of associations/organisations, disposition of codes and ethics) Productions (quantity of content produce for employer and as pastime, type of content produce) Working tasks main focus (creating, managing, etc.)	
Objective IV: Collaboration with other Work Packages	
6. Work package 5 (mobility)	7. Work package 5 (attachment)
Mobility questions added to workplace (type of vehicle, commuting, time for transportation) Social networks (at the workplace and home)	Attachment questions added to residency (time spent in Belgium, Brussels, nationality, attachment to the city)
8. Work Packages 2&3 (companies)	9. Work Package 6 (communities)
Ties to the workplace (added to employment) Subsidiary questions	<input type="checkbox"/> Ties to communities of practice (informal/semi-formal groups and gatherings' participation) <input type="checkbox"/> Subsidiary questions

From the literature review towards the 7ps

Three integral entities of a media cluster have been identified in the literature review of Work Package 1: media institutions, media communities and media workers. Media workers have been conceptualised as the second entity to include into the Brussels media clusters framework. The literature study showed that "access to skilled labour" and the "personnel" available in a cluster are seen to be essential in clusters (Karlsson& Picard, 2011). Building on these observations added to others, Work Package 1 (see Deliverable 1.1b) has created a **general framework of analysis to generate clear answer to deciders' interrogations and therefore provide policy advice**. This framework is made up of 7 parameters (hereafter described as the 7 P's): place, proximity, pertinence, profile, path-dependency, policy, and performance. These 7 parameters are linked to 7 questions, respectively: Where, how close, how many, who, what evolution, which policies, and what outputs. Answers are to be given as interpretations of the results of each Work Package. If all questions will be asked in Work Packages 4 & 5, Work Package 4 will go deeper in future research into certain P's (place, proximity, pertinence, and profile) (see Table 7).

Table 7 – The Ps that will be answered within the future research of WP 4.

Parameter	Understood as	Questions and Deliverables that answer them:	
Proximity	...the topographical and topological nearness influencing the media cluster's dynamics.	How closely linked are media workers to one another within and across companies? (Emotional attachment, social networks)	D4.4
Pertinence	...the scale of the cluster in quantity of entities and concentration for the place linked to the development phase of the cluster.	How many media workers are located in Brussels media clusters? (Density, answered through census and questionnaire)	D4.4
Profile	...the type of entities and their functions within a cluster.	Who are the workers and kind of tasks do they do on a day-to-day basis? (Profiles and skills)	D4.4
Policy	...the media governance tools from all levels influencing the media cluster's dynamics.	Which laws, contracts and incentives apply to media workers?	D4.4
Performance	...the endogenous and exogenous externalities that media clusters produce.	What outputs do media workers produce and what are their competences? (Skills)	D4.4

Where do we go from here?

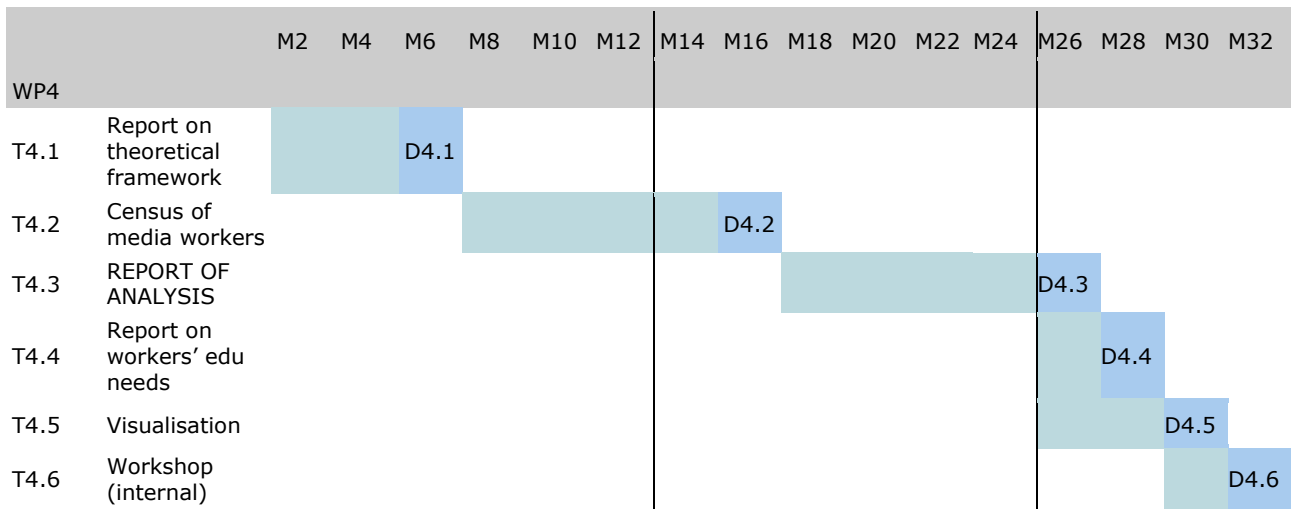
The first phase of Work Package 4 is finalized with Deliverable 4.1. Four more tasks need to be fulfilled within the course of the coming 10 months (see below). The quantitative survey aimed at answering the four cited objective (profiles, skills, position and collaboration with other Work Package) is currently being drafted and after being preliminary tested, will be made available online to media workers. A strategy of mixing general advertising of the questionnaire, contact with public institutions and private media companies (identified by Work Packages 2) will be used to obtain a maximal amount of answers. It will also be given to key companies within the clusters identified in this project. Within each cluster, we propose to identify 9 key companies (3 bigger companies, three smaller companies and 3 start ups) and create a partnership, to distribute the quantitative questionnaire in, and get answer in a comprehensive manner. Those companies will have the opportunity to have employees answer the questionnaire online, or during a face-to-face encounters with a researcher.

Data will then be analysed, and a report of analysis will be produced, as well as a report on current and future workers educational needs in terms of missing skills. Conclusions and policy advice will be given through the 7P's, and made available online for public dissemination (within and outside participating bodies). Here is to the new and updated timeline for WP4:

WP2		
4.1	Report on theoretical framework.	Desk research and creation of a framework to analysis cluster dynamics by supplementing and partially modifying models frequently used.
4.2	Census of relevant media workers.	Collection of an initial census of media workers through collaboration with WP2 and professional associations, complementation with social media monitoring and web crawling techniques.
4.3	Sociodemographic report of media professionals in BXL.	Conduction of a quantitative survey in order to gather data from media workers for WP4 / WP5, building on the recent existing survey on journalists of a Belgian scope.
4.4	Report outlining the existing educational needs.	Analysis of the survey based on the developed framework with the focus on educational needs of the media workers.
4.5	Visualisation of media professionals.	Visualisation of the findings by using software in order to trace the networks of online relationships between media workers.
4.6	Workshop.	Preparation and organization of internal dissemination of findings to discuss strategies to enhance the training and working conditions of media workers.

Media Clusters Brussels: DELIVERABLE 4.1

Report on Theoretical Framework: Media Workers' Skills and Profiles



Appendix: References

- Abbott, A. (1988). *The system of professions: An essay on the division of expert labor*. Chicago: University of Chicago Press. Retrieved from <http://books.google.be/books?hl=fr&lr=&id=WWzRAgAAQBAJ&oi=fnd&pg=PR7&dq=Abbott,+Andrew+D.+1988.+The+System+of+Professions:+An+Essay+on+the+Division+of+Expert+Labor.+Chicago,+IL:+University+of+Chicago+Press.&ots=StqnOJdWqw&sig=YQKUZGlohVn7MWAKZubQnyIOu4w>
- Anderson, J. R. (1982). Acquisition of cognitive skill. *Psychological Review*, 89(4), 369.
- Asheim, L. (1979). Librarians as professionals. *Library Trends*, 27(3), 225–257.
- Bates, P., Cox, A., Robertson-Smith, G., & Garrett, R. (2009). *High Performance Working: Developing a Survey Tool* (No. 5). Institute for Employment Studies & UK Commission for Employment and Skills.
- Bollinger, H., & Hohl, J. (1981). From profession to occupation: on the deprofessionalization of physicians' situation. *Soziale Welt*, 32(4), 440 – 464.
- Casper, S. (2007). How do technology clusters emerge and become sustainable? Social network formation and inter-firm mobility within the San Diego biotechnology cluster. *Research Policy*, 36(4), 438–455. <http://doi.org/10.1016/j.respol.2007.02.018>
- Chesnel, S., Molho, J., Morteau, H., Raimbeau, F., & Sagot-Duvaouroux, D. (2013). *Les clusters ou districts industriels du domaine culturel et médiatique: revue du savoir économique et questionnement*. Angers: Université d'Angers.

- Creative Skillset. (2010). *2010 creativemediaworkforcesurvey*.
- Creative Skillset, & Creative CulturalSkills. (2012). *Creative Media and Entertainment: Sector Skills Assessment 2012*. UK Commissionforemploymentandskills.
- Creswell, J. W. (2013). *Research Design: Qualitative, Quantitative, and Mixed MethodsApproaches*. SAGE Publications. Retrievedfrom <https://books.google.com/books?hl=en&lr=&id=EbogAQAAQBAJ&pgis=1>
- Deuze, M. (2007). *Media Work*. Polity.
- Deuze, M. (2009). Media industries, workandlife. *European Journal of Communication*. Retrievedfrom <http://ejc.sagepub.com/content/24/4/467.short>
- Deuze, M. (Ed.). (2011). *Managing mediawork*. Los Angeles: Sage Publications. Retrievedfrom http://books.google.be/books?hl=fr&lr=&id=WmKjHubX640C&oi=fnd&pg=PR1&dq=managing+media+work+&ots=6kwP7anto3&sig=B_xfPB1bO1xZ6FO8-VdWzGjexpM
- Erikson, R., & Jonsson, J. O. (2001). *European Social Survey Core Questionnaire Development – Chapter 2: Howtoascertainthesocio-structuralpositionofthe individual in society*. London: Center forComparativeSocial Surveys.
- European Social Survey. (2001). *European Social Survey Core Questionnaire Development*. London: Center forComparativeSocial Surveys.
- Grabher, G. (2002). Cool Projects, BoringInstitutions: TemporaryCollaboration in SocialContext. *Regional Studies*, 36(3), 205–214. <http://doi.org/10.1080/00343400220122025>
- Grint, K. (2005). *The Sociologyof Work: Introduction*. Polity.

- Hallin, D. (2008). Neoliberalism, social movements and change in media systems in the late twentieth century. In D. Hesmondhalgh & J. Toynbee (Eds.), *The Media and Social Theory* (pp. 43–58).
- Hesmondhalgh, D., & Baker, S. (2013). *Creative Labour: Media Work in Three Cultural Industries*. Routledge.
- Hess, T., & von Walter, B. (2009). Toward Content Intermediation: Shedding New Light on the Media Sector. *International Journal on Media Management*, (February 2015), 37–41. <http://doi.org/10.1207/s14241250ijmm0801>
- Huang, E., Davison, K., Shreve, S., Davis, T., Bettendorf, E., & Nair, A. (2006). Facing the Challenges of Convergence: Media Professionals' Concerns of Working Across Media Platforms. *Convergence: The International Journal of Research into New Media Technologies*, 12(1), 83–98. <http://doi.org/10.1177/1354856506061557>
- Hunter, D., Lobato, R., Richardson, M., & Thomas, J. (2012). *Amateur Media: Social, cultural and legal perspectives*. Routledge.
- Jenkins, H. (2006). *Convergence culture: Where old and new media collide*. NYU press. Retrieved from <https://books.google.be/books?hl=en&lr=&id=RIRVNikT06YC&oi=fnd&pg=PR7&dq=convergence+culture&ots=9B5InyWFUv&sig=pE-qhk2mBDipvRrT1ukTrcdLL7A>
- Kallinikos, J., & Mariátegui, J.-C. (2011). Video as Digital Object: Production and Distribution of Video Content in the Internet Media Ecosystem. *The Information Society*, 27(5), 281–294. <http://doi.org/10.1080/01972243.2011.607025>

- Karlsson, C., & Picard, R. G. (2011). *Media Clusters: Spatial Agglomeration and Content Capabilities*. Edward Elgar Publishing.
- Kong, L. (2014). From cultural industries to creative industries and back? Towards clarifying theory and rethinking policy. *Inter-Asia Cultural Studies*, 15(4), 593–607. <http://doi.org/10.1080/14649373.2014.977555>
- Lampel, J., Shamsie, J., & Lant, T. (2006). Toward a deeper understanding of cultural industries. In J. Lampel, J. Shamsie, & T. Lant (Eds.), *The business of culture: Strategic Perspectives on Entertainment and Media*. London: Lawrence Erlbaum Associates Publishers. Retrieved from https://books.google.be/books?hl=en&lr=&id=1yJ5AgAAQBAJ&oi=fnd&pg=PA3&ots=yBoI5_1DRF&sig=5xs9RTd2CtgGI7HtR-YbmPYOLJU
- Latour, B. (1996). On actor-network theory: a few clarifications plus more than a few complications. *Soziale Welt*, 47, 369–381.
- Law, J. (1992). Notes on the theory of the actor-network: Ordering, strategy, and heterogeneity. *Systems Practice*, 5(4), 379–393. <http://doi.org/10.1007/BF01059830>
- Lazzarato, M. (1996). Immaterial labour. *Radical Thought in Italy: A Potential Politics*, 1996, 133–147.
- Lee, N., & Hassard, J. (1999). Organization unbound: actor-network theory, research strategy and institutional flexibility. *Organization*. <http://doi.org/10.1177/135050849963002>
- Miller, T. (2011). The new international division of cultural labor. In M. Deuze (Ed.), *Managing Media Work*. Sage Publications.

- Mosco, V. (2006). Knowledge and Media Workers in the Global Economy: Antinomies of Outsourcing. *Social Identities*, 12(March 2015), 771–790. <http://doi.org/10.1080/13504630601030958>
- Newman, I. (1998). *Qualitative-quantitative Research Methodology: Exploring the Interactive Continuum*. SIU Press. Retrieved from <https://books.google.com/books?hl=en&lr=&id=xumf1ABFz8cC&pgis=1>
- Parlement de la fédération Wallonie-Bruxelles. (2012). *Les états généraux des médias d'information au Parlement de la Fédération Wallonie-Bruxelles*.
- Picard, R. G. (2002). *The Economics and Financing of Media Companies*. Fordham University Press.
- Picard, R. G. (2014). *Media Firms: Structures, Operations, and Performance*. Routledge.
- Quandt, T., Löffelholz, M., Weaver, D. H., Hanitzsch, T., & Altmeyden, K.-D. (2006). American and German Online Journalists at the Beginning of the 21st Century. *Journalism Studies*, 7(2), 171–186. <http://doi.org/10.1080/14616700500533486>
- Raeymaeckers, K., Heinderyckx, F., Libert, M., De Maeyer, J., De Dobbelaer, R., Le Cam, F., ... others. (2013). *Le journaliste belge en 2013: un autoportrait*. Retrieved from <http://difusion.ulb.ac.be/vufind/Record/ULB-DIPOT:oai:dipot.ulb.ac.be:2013/150324/Details>
- Storey, J., Salaman, G., & Platman, K. (2005). Living with enterprise in an enterprise economy: freelance and contract workers in the media, 58(8), 1033–1054. <http://doi.org/10.1177/0018726705058502>
- Volti, R. (2008). *An introduction to the sociology of work and occupations*. Los Angeles: Sage Publications. Retrieved from

Media Clusters Brussels: DELIVERABLE 4.1

Report on Theoretical Framework: Media Workers' Skills and Profiles

<http://scholar.google.be/scholar?hl=fr&q=an+introduction+to+the+sociology+of+work+and+occupations&btnG=&lr=#0>

Wenger, D. H., & Owens, L. C. (2012). Help Wanted 2010 An Examination of New Media Skills Required by Top U.S. News Companies. *Journalism & Mass Communication Educator*, 67(1), 9–25.
<http://doi.org/10.1177/1077695811426826>

Westlund, O. (2011). *Cross-Media newswork. Sensemaking of the Mobile Media (R)evolution*. University of Gothenburg, Sweden.

Zarlenga, M. I., Ulldemolins, J. R., & Morató, A. R. (2013). Cultural clusters and social interaction dynamics: The case of Barcelona. *European Urban and Regional Studies*, 0969776413514592.
<http://doi.org/10.1177/0969776413514592>