

## **Media Industry Clusters and Public Policy**

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## Introduction

Over the past two decades, public policies and programs in support of industry clusters have become widespread in policy domains devoted to regional, metropolitan, or sectoral development. Although cluster policies and programs are found in many different industries, cluster approaches to media industries are relatively unfamiliar, and the scholarly literature on public policy for media clusters is very thin. It is the task of the present chapter to draw out and explore the policy implications of cluster approaches to media industries.<sup>1</sup>

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<sup>1</sup> The analysis in this chapter pertains mainly to media systems in contemporary democracies with comparatively advanced, open economies, whose major cities are culturally diverse, and where freedom of speech is exercised. In such countries the media system enjoys relative political autonomy, consumers' choices are relatively unconstrained, the telecommunications system is relatively up to date, niche media exist alongside mainstream media, the system encompasses a mix of public, private, and not-for-profit media outlets, and the state remains more or less committed to democratic processes, pluralism, free speech, a free press, and national cultural expression through various combinations of regulatory intervention, publicly owned media, and encouragement of indigenous content production. Also, the state tolerates critical political discourse and does not encourage or tolerate intimidation of journalists. The range of media systems I have in mind corresponds roughly to those encompassed by Hallin & Mancini's (2004) three models of media systems: liberal, democratic corporatist, and polarized pluralist, which vary in terms of the degree of development of the mass press, professionalization of journalism, media partisanship (political parallelism), and state intervention. I leave it to others to investigate and theorize agglomerative media industry behaviour and related policy issues in media regimes that are highly centralized, intolerant, violent, or lawless.

An industry cluster is a geographically bounded production system encompassing related industries and consisting of co-located and functionally interlinked firms and their customers and suppliers, as well as supporting institutions, service producers, labour, associative bodies, public agencies, and governance institutions. Clusters can be characterized according to seven key parameters, which must be taken into account in the design and implementation of cluster policy: geographical concentration, industrial specialisation, variety of actors, mixture of competitive and cooperative behaviour, critical mass, and stage in evolutionary life cycle (Andersson et al. pp. 13 and 19). Clustering is a natural occurrence in most industries in the absence of countervailing forces (Krugman, 1994), and media industries are no exception. The effects of competition, technological change, and economies of scale make clustering likely to be a strong tendency in media industries into the foreseeable future (Noam, 2009).

Although the Hollywood film industry has attracted much attention since the mid-1980s as a leading example of post-Fordist flexible specialization, it has had nowhere near the influence on cluster theory or practice as Silicon Valley, a much-imitated paradigm of industry clustering.<sup>2</sup> The earliest explicit cluster policies for media industries made their appearance in the 1990s in connection with digital media and e-commerce initiatives. Cluster approaches to media industries have since gained traction under the impulsion of digital convergence, globalization, the rise of metropolitan regions as economic motors, and media industry deregulation and transnationalization. Older media industries (print, film, and broadcasting) are being brought into cluster policy frameworks, often through inclusion in cluster-like metropolitan or regional policy initiatives aimed at broader groups of cultural or creative industries, creative cities, or digitally

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<sup>2</sup> See for example Miller & Côté (1987).

converged media sectors (Birch, 2008; Conference Board of Canada, 2008; Creative Metropolises, 2010; HAL, 2009; PWC, 2009; UNCTAD, 2008).<sup>3</sup>

More than a hundred media agglomerations around the world have been identified and described (Achtenhagen & Picard, 2009; Picard, 2008). The public policies that affect them, enabling them to thrive or survive, reflect a wide variety of sectoral and jurisdictional arrangements and conceptual frameworks. All levels of government are involved in cluster policies. Subnational governments, which are closest to local economic constituencies, often originate and implement cluster initiatives in federal states. For national governments, cluster policies offer a way of customizing and regionalizing national policies. International or supranational institutions, notably the OECD, UNIDO, and the European Union, have played a key role in diffusing cluster approaches and associated cluster policy practices among national and subnational governments.

Public policy for media clusters differs from prevailing media policy in two important respects. First, although industry cluster policy practically always requires involvement of national policymakers and national programs at multiple points, it speaks first and foremost to local and sub-regional economic development concerns. Media cluster policy is no exception, with the added twist that 'local' usually refers to the major metropolitan regions where media agglomerations are found, not small towns or rural regions. Media policy proper, in contrast, practically always falls under the jurisdiction and operational responsibility of the national government, although subnational governments often play a role in media policy through industry support and incentive programs, and - in a few countries - policy responsibilities in key

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<sup>3</sup> Film, television, and animation constitute the group of industries most frequently found in creative-city policies and programs (Evans, 2009).

media sectors such as broadcasting are delegated to subnational authorities. Further, the involvement of private actors in the design and implementation of cluster policy, as well as cluster governance, is usually expected and encouraged, while media policy proper is nominally under the sole control of the state, which may seek policy guidance through performance of elaborate public consultations.

Second, media cluster policy, like other cluster policies, has an overarching economic development orientation, seeking to increase the economic fortunes of the host jurisdiction through improvement of the performance of the firms in the cluster. National media policy, on the other hand, has a very different agenda which historically is concerned with balancing the demands on the national media system, especially the broadcasting sector, in order to ensure market competition, diversity of voices, variety of opinion, and national cultural expression, all in the name of national cultural sovereignty and democratic political process. These regulatory principles were developed in the period of mass communication and competition for broadcasting frequencies, and now must urgently be overhauled for interactive broadband-based media environments with their proliferating channels, communicative abundance, and strong tendency to domination by vertically integrated conglomerates.

This chapter unpacks and assesses public policy for media clusters. I first briefly review several characteristics of media industries that differentiate them from other industries, giving them a unique policy environment which makes a cluster approach to media industries a more complex undertaking than in other industries. I then consider contemporary industry cluster policy thought and practice, examining the issues and challenges involved in extending cluster policy approaches to media industries for economic development purposes. In a concluding section I consider how media cluster policy in an age of communicative abundance could

provide a way to fulfill national media policy's longstanding normative commitments regarding pluralism, diversity, localism, and civic engagement.

### **Media Policy and the Distinguishing Characteristics of Media Industries**

Media are "one of the most lucrative and important growth areas of global capitalism" and media industries "do not hesitate to undertake the political activity necessary to promote their interests" (Raboy, 2005). Media policymaking is highly political, and the media industry is dominated by powerful interests who can shape the policymaking process, as Freedman (2008) shows in his study of the politics of media policymaking in the United States and the United Kingdom. The overall trend in media policies is toward regulatory relaxation and market liberalization regarding ownership and content origin (van Cuilenberg and McQuail, 2003). This trend, however, does not imply the withdrawal of the state from media policymaking generally, but instead a changing role. Concurrent trends toward expansion of the role of the state include greater stringency in extension and enforcement of intellectual property rights, a vigorous increase in surveillance activities, involvement in negotiating and enforcing international trade agreements, and increased participation of subnational governments in economic development initiatives involving media industries, including media cluster initiatives.

Three characteristics distinguish media industries from other industries and complicate placing media in an industry cluster policy framework designed primarily to produce local economic development, which is the principal orientation of most cluster policies.

First, media in liberal democracies are expected to serve "public interest, convenience and necessity" (in the words of the U.S. Communications Act of 1934). Mass media are a public good with significant positive externalities (Blosser et al., 2007). The advent of apparently

limitless media channels does not change the fact that media are central to the production of social meaning, and are critical to democratic processes (Curran, 2002; Freedman, 2008; Silverstone, 2007 and 1999). This is the case to such an extent that “media policy to a significant degree is citizenship policy” (Hutchison, 1999: 69). Historically the media industry has been considered by policymakers as not just one more economic sector, but rather as a critical enabler of social cohesion and political expression. Dual economic and civic-cultural functions of media are widely acknowledged in media scholarship and in national and international law (Just, 2009; Napoli, 2001). As political authorities have known for centuries, media are powerful. The growing ubiquity of networked communication increases the potency of the media (Castells, 2009). Media industries provide essential domestic services in the form of connectivity, communication, and content that support cultural citizenship, civic engagement, social inclusion, and democratic political practices. Historically, few countries have left the provision of media-based goods and services entirely to the market, and in liberal democracies telecommunications, broadcasting and to a lesser extent the press are subject to regulatory oversight to ensure competition, adequate geographic coverage, diversity of voices, privacy, and freedom of speech. The broadcast industry, in particular, is closely regulated to ensure competition and diversity of voices - ideals that speak to concerns about concentration of ownership or political control of the media industry. Furthermore, many countries actively protect and promote indigenous mediated cultural expression through dedicated programs and policy instruments. Contemporary media cluster policies, on the other hand, almost by definition aim to increase economic performance of particular subnational jurisdictions, rarely addressing media’s non-economic values or involving stakeholders other than the business and economic development communities in policy processes. To the extent that media cluster policy seeks to promote economic competitiveness

and wealth generation, it represents a very selective application of national policy (more closely akin to industrial policy than mainstream media policy) at the local level.

Second, media industries are assuming a strategic economic role. Along with information and communication technologies, media industries are key players in the rapidly emerging cognitive-cultural capitalist economy as drivers of innovation and economic growth (Scott, 2008). Most of the principal media industry clusters are located in major metropolitan areas, which in many cases are also national or regional political capitals (Krätke, 2003; Krätke & Taylor, 2004). Positional improvement in the world hierarchy of media cities is likely to yield considerable economic and political value. The creative-city and creative-class movements have inspired many cities to race to assemble the necessary conditions and infrastructure to attract and grow cognitive-cultural industries, among which the media industries are particularly appealing because of their high potential for multiple positive externalities. Media industries produce and amplify symbols, images, and meanings that circulate widely, potentially yielding many indirect economic benefits to media cluster host jurisdictions. In addition to directly generating revenue and employment, successful media clusters yield domestic and international “soft power” by magnifying political and commercial communication and by augmenting metropolitan visibility, which can be leveraged to create economic opportunities. Media industries help to brand the host city, spotlighting urban amenities and spurring consumption of downtown leisure and entertainment services. A screen industry cluster brings celebrities and their halos, while a vigorous and visible interactive media cluster suggests that the host city is at the leading edge of cognitive-cultural production and consumption. These features of media clusters appeal not only to the creative class of transient professionals and corporate executives, but also to diverse stakeholders in the urban cultural economy: local politicians, policymakers, geeks, bohemians,

culture makers, downtown universities and retailers, sophisticated consumers, real estate developers and investors, and gentrifiers - the metro condo crowd - creating relatively diverse support for "growth coalitions" around media industries.

Third, media industries are currently in a state of extreme flux driven by massive networked digital convergence. Rapid improvements in software, computing, and telecommunications technologies have resulted in dramatically lowered cost of content reproduction and distribution and spectacular expansion of user-generated content. Consumption of digital media content, which is increasingly delivered via portable, personal devices connected to interactive broadband networks, is pushing older media to the sidelines and inflicting economic damage on them by undermining their business models. All three layers of the media industry (transport, software, and content) are affected by convergence, blurring the boundaries among the multiple historically distinct older media subsectors such as printing, magazine or book publishing, broadcasting, advertising, and motion pictures, spurring the emergence of newer media subsectors such as electronic games, mobile video, and social media, and generally disrupting the value chain of suppliers, infrastructure providers, advertisers, distributors, and customers. Businesspersons and policymakers face considerable uncertainty regarding media business models, industry trajectories, and endpoint scenarios. Rapid change and the indeterminate state of the industry imply that multiple evolutionary pathways are possible, requiring flexibility, bet-hedging, and very adept policy and program management capabilities. From a cluster perspective this requires concurrently addressing early-stage path-creation issues as well as technology and business model migration issues affecting the major mature subsectors of the industry. Media innovation also blurs geographical boundaries and creates new sets of opportunities and tradeoffs between the local and the external which media cluster policy must

address. Thus domestic adoption and consumption of media innovations is, or should be, as much a concern of media cluster policy as export or competitiveness, which are invariably the goals of cluster policy initiatives.

### **Cluster policies and policy instruments**

The overarching goal of industry cluster policy is to enhance the economic welfare of the jurisdiction in question by improving the performance of an industry agglomeration. It does this by facilitating the exploitation of positive externalities in clusters:

The fundamental rationale for policy intervention in clusters is to facilitate the exploitation by firms and workers of potential local external economic benefits from input-output linkages and knowledge spillovers and hence increase productivity and generate growth. (Potter, 2009)

Industry clustering is regarded as a means to an economic development goal, not as an end in itself: “Clusters are today recognised as an important *instrument* for promoting industrial development, innovation, competitiveness and growth” (Andersson et al. 2004: 1, emphasis added). What can policymakers hope to achieve through cluster policies? Industry clusters compete with each other nationally and internationally, so established clusters must be improved and new clusters incubated in an ongoing economic development effort. In the case of media cluster policy, the main emphasis is often on digital media, which are in an early enough stage of their life cycle to permit the hope that policy intervention will trigger a clustering process leading to the development of a superior competitive position. Media cluster policies that encompass

older media industries also invoke the challenge of convergence and digital transformation as a major area of focus.

Policymakers usually define "cluster" very broadly. Many initiatives use the term "cluster" as a loose label for a local collection of firms and other players without addressing questions of cluster structure, evolution, or performance. Several commentators from a range of countries have observed that in practice, clusters are defined so loosely as to permit a wide variety of policies and policy interventions (Burfitt, MacNeill & Gibney, 2007; Duranton, 2009; Martin & Sunley, 2003; Navarro, 2003; Taylor, 2010; Torre, 2008 and 2006; Wrobel, 2009). This is probably one reason why clusters remain such a popular and heterogeneous area of public policy. Consequently, “there is no single 'generic' cluster policy but rather a myriad of interventions that prove difficult to classify” (Peck and Lloyd, 2008: 396), due to the fact that cluster policies are customized local bundles or mixes of national policies. Cluster policy plays the particular role of customizing national policy (usually innovation, industrial, or regional development policy) to suit the needs and circumstances of particular localities (Nauwaelers, 2003). According to the OECD,

cluster policy is often implemented with the intention of joining up existing policies. In these cases, the choice of instruments is limited by established governmental practice. This means that what actually takes place under the rubric of ‘cluster policy’ is tightly conditioned by a wide range of government systems from the technology, economic, utilities and scientific policy areas. (OECD, 2001: 394).

Explains the European Commission in a recent overview of European cluster policies:

Typically, policies in support of cluster development are not explicitly called “cluster policies” but are part of broader strategies aiming at regional and business development.

These are often those having the strongest impact. Similarly, different methods may be used, ranging from hands-on methods, like providing information, contacts, assistance, advice or direct funding to hands-off methods, like lobbying, marketing, monitoring and reporting. This makes it inadvisable to define “cluster policies” in a strict and uniform way, although they could in general be described as policy mixes to support the development of such regional systems. (EU, 2008).

It is to be noted that most cluster policy instruments are not specific to clusters. Other than cluster-specific governance and promotion organizations, cluster policy is a domain of public policy without unique or dedicated instruments. Most cluster policy instruments are sourced from existing programs in other policy domains:

[C]luster policies do not exist as a new policy area but rather as an innovative combination of existing policy instruments from traditional policy fields.... Cluster policy becomes a mean to use these instruments in a more focused way, taking better into account the specific environments in which firms operate. (Nauwaelers, 2003: 24)

The key challenge for public policymakers and their cluster partners is to operationalise cluster policy in such a way as to improve the economic performance of the cluster. Cluster policy is operationalised through an array of incentives and disincentives administered via various policy instruments. Eight broad classes of cluster policy instruments are employed (EU, 2008): information and contact brokerage, practical assistance and advice, direct financing and facilities, events and training, networking and events, lobbying, marketing, and monitoring and reporting (see also OECD, 2007).

Cluster policy must necessarily assume that appropriate interventions can improve the aggregate performance of firms in the cluster:

[W]ith the right local networks, and the appropriate local levels of trust, learning, competencies, social capital, and institutional support, a place can generate local social capital and can become innovative, productive and internationally competitive within a global mosaic of economic activities (Taylor 2010: 278).

By providing strategic vision and policy integration at the metropolitan or subregional level, cluster policies provide a way of combining “different aspects of regional development into a holistic policy framework: e.g. technology innovation, regional productivity advantages, and growing versus declining sector balancing” (OECD, 2006: 109).

In practice, cluster promotion usually means promoting *innovation*, with its anticipated performance-enhancing effects (Arthurs et al., 2009). Inventories of cluster policy instruments show that most policy instruments used for cluster development have to do with innovation or regional economic development, and usually are under the auspices of ministries of science-technology-research-innovation, regional development, industry, or finance-economy (Oxford Research 2008). Nauwaelers’ 2003 examination of the main instruments of cluster policy in Europe found projects relating to infrastructure, consulting, inward investment, competence centres, specialized R&D centres, brokers and intermediaries, SME networks, collaborative R&D, inter-firm partnerships, cluster animation, regulatory measures, education and training, risk capital, technology transfer and commercialization, policy consultation, strategic planning and foresight, assistance for technology adoption and upgrading, and regional branding, all assembled into various configurations in different national and regional cluster policy initiatives (see also Andersson et al., 2004: 95). An analogous inventory of policy instruments at work in a media cluster would include many of these same instruments, as well as some instruments that are specific to media policy but are not necessarily implemented in a cluster framework:

ownership regulations, content production subsidies, tax incentives to attract foreign productions, national origin requirements, etc. Also, since media clusters usually are located in central urban cores, large media physical infrastructure projects such as sound stages and exhibition centres usually involve expensive downtown real estate and bring public and private real estate interests into play in schemes to redevelop and brand specific metropolitan neighborhoods or districts (Goldsmith and O'Regan, 2005).

Cluster initiatives often aim to induce collaboration among firms and other cluster players. Cluster champions report that physical proximity does not necessarily or automatically induce relational proximity (cooperative behaviour) among firms in a cluster - instead it needs to be developed through leadership and consensus-building (Tremblay and Cecilli, 2009). The same could be said of competition among specialized service providers in a cluster, such as institutions of higher education. The value of a cluster approach in the eyes of senior governments is that, if cluster players can be induced to present partnership projects, the political liability of selecting one particular firm or higher-education institution over another for investment purposes is removed.

Contrary to policymaking based on ignorance, dogma, hope, or special interests, "fact-based" and "evidence-based" policymaking require reliable empirical inputs and clear understanding of causes and effects, but cluster policymaking raises significant epistemological issues regarding policy elaboration, execution, and performance measurement. Policy is supposed to be based on an accurate understanding of the system whose behaviour is to be affected by policy interventions, but maps and models of cluster systems are always very approximate at best. Performance measurement requires that explicit assumptions be made about key linkages, dynamics, outcomes, cluster boundaries, ways to attribute impacts, and ways to

measure performance (Schmiedeberg, 2010). This is especially challenging in the case of media clusters, where spillovers, convergence, rapid product innovation, and hybrid combinations of economic and non-economic policy goals are common (Davis, Creutzberg and Arthurs, 2009). Most cluster initiative have provisions for performance benchmarking and include a set of indicators for intermediate and final performance outcomes (Arthurs et al., 2009; Davis, Creutzberg and Arthurs, 2009; Meier zu Köcker and Rosted, 2010; Wise, Langkilde and Bertelsen, 2008). National statistical agencies generally do not produce data that are regionalized in such a way as to be useful as indicators to cluster policymakers or managers, and standard industrial accounting categories such as NAICS do not provide the resolution necessary to track innovation in emerging areas such as digital media. Therefore customized empirical observations to monitor cluster behaviour must be produced on a regular basis, and this can be an expensive and time consuming proposition for policymakers and industry stakeholders alike. Furthermore, many kinds of impacts or policy outcomes, such as improvement in cluster brand, leadership, educational infrastructure, collaborations, or technology or human resource flows, can only be ascertained via customized surveys, raising the question what is the proper "dependent variable" of cluster policy interventions (Arthurs et al. 2009; see also Gagné et al., 2010).

### **Capabilities of media clusters**

Cluster policymaking is now in its fourth or fifth generation, and thousands of scholarly papers and policy reports on clusters have been published. One reliable take-away from this body of research and policy experience is that no single superior structure for an industry cluster exists. Just as differences in firm performance among superficially identical firms are determined by

firm-level capabilities, not by structural differences or similarities with other firms, the same is true of industry clusters, local production systems, or economic regions, as proposed by Lawson (1999). Capabilities can be distributed among cluster players in different ways, so a variety of configurations is possible in any given cluster as well as in any given group of clusters in the same industry. The policy lesson is that structural mimetism is a misplaced objective: policy interventions are just shooting in the dark when their goal is to produce a particular configuration of cluster actors believed to cause superior performance in some other cluster. Instead, a capabilities-oriented policy framework is the key to strategic cluster policy, and policy intervention should aim to improve specific cluster capabilities, not necessarily to produce specific configurations of structures, linkages, knowledge flows, or processes.

To explore a cluster policy framework that focuses on capabilities, we need a workable and accurate typology of principal cluster capabilities. However, only a small body of research brings a capabilities perspective (drawn from the Resource-Based View of the firm and its variants) to cluster theory.<sup>4</sup> Röttmer and Katzy (2005) use six constructs to characterize cluster capabilities: rule setting and enforcement, strategic decision making, reconfiguration of assets, opportunity recognition, networking, and learning. Hervas-Oliver and Albors-Garrigo (2007) use seven constructs: skilled labor, social interactions, business sophistication, supplier linkages, network, R&D support, and training. The following discussion reviews eight key cluster capabilities that were identified in the course of development of a performance measurement framework for technology-based clusters in Canada (Arthurs et al., 2008; Davis, Creutzberg and

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<sup>4</sup> For a recent assessment of the Resource-Based View see Lockett, Thompson & Morgenstern (2009).

Arthurs, 2009), and discusses how they might be operationalised or adapted in the case of the software and content layers of media industry clusters.

*Novelty-creation capability.* Cluster theory is premised on the idea that enhanced industrial performance requires innovation, which is assumed to be technological innovation. Thus cluster policy always seeks to deepen the cluster's capability to produce or source scientific and technical knowledge and deliver it to local firms, and to influence the supply, quality, and effectiveness of R&D, technology transfer and commercialization, technical support services, and scientific and technical education and training. The problem with this approach, from the perspective of media industries, is that it captures innovation processes in the technology-intensive transport and software layers, but not in the content layer, where formal R&D is rarely undertaken yet where very high rates of innovation take place.<sup>5</sup> Media clusters tend to support R&D initiatives for exploring various new combinations of digital technologies rather than R&D for storytelling, narration, entertainment, documentaries, or journalism. Prevailing creative-class and creative-city doctrines and practices try to solve the content innovation problem by developing urban places, events, or associations that intermediate between the creative practitioner communities and the organizations that finance and commercialize cultural products and services (Cohendet, Grandadam & Simon, 2010). Media cluster policy that seeks to improve the rate and quality of novelty creation in the content layer needs to develop stronger and more effective incentives and support mechanisms for "soft" or aesthetic innovation (Stoneman, 2010), for example by modifying the innovation support regime to make firm-level investment in content R&D eligible for tax incentives in ways analogous to scientific, technical, and

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<sup>5</sup> For a fuller discussion of these points see Davis, Creutzberg and Arthurs (2009).

engineering R&D, and by creating incentives for firms in non-media sectors to use media products and services as intermediate inputs (cf. Bakhshi and McVettie, 2009).

*Product and service innovation capability* refers to the effectiveness of firm-level processes to source knowledge and other inputs, transform them into new offerings, and deliver them to paying customers. As proxy measures of this capability, innovation surveys use the percent of sales generated from new products or services, the fraction of revenues generated through exports, and the degree of novelty of the innovation (firm-first, region-first, world-first, etc.). Effectiveness of innovation is an important question in cluster policy in light of evidence that firms in clusters have lower rates of product and service innovation, but higher rates of commercially successful innovation, than out-of-cluster firms, underlining that knowledge flows and spillovers in clusters are about market learning as well as about technological learning (Breschi and Lissoni, 2001; Cornish, 1997). In the case of media firms, the challenges of effective new product development are great. The pervasiveness of the "nobody knows" principle in media product innovation culture (Caves, 2000) is understandable since many media products are pure experience goods, but at the same time the relative neglect of audience and consumer research in support of product innovation in the media industries works against reduction of uncertainty concerning product acceptance. Media clusters can improve the product and service innovation capabilities of firms through policy instruments that accelerate market learning by providing incentives and opportunities to adopt improved new product development routines, by encouraging development of local competences in media product innovation and in media-related consumer behaviour research, and by stimulating demand for indigenous media products.

*Entrepreneurship, new firm formation, and early stage investment capability* refers to the ability of the cluster to renew itself and grow the population of viable firms in the cluster.

This capability can be measured by the rate and quality of new firm formation and by assessment of the investment situation in the cluster. Policy measures designed to improve entrepreneurship, new firm formation, and early stage investment encompass training, education, incubation, business acceleration, establishment of angel networks, and investment incentives. Such measures are very common in industry cluster policy portfolios, and they are practically always found in digital media cluster policies. Media cluster policies need to consider capabilities for entrepreneurship, new firm formation, and investment very carefully. Media clusters exhibit high rates of new firm formation, but low average rates of firm growth. The population of media firms is dominated by micro-enterprises which are usually constituted by freelance workers (Davis, 2010). Most are not intended to grow, or resourced with growth in mind. Media cluster policy should address the needs of this group of enterprises, and more generally to improve the generally precarious working conditions of media labour. Since full-time permanent salaried employment is no longer the norm in media industries, a stronger emphasis in media cluster policy on support measures for entrepreneurs and new firms is very much warranted. Management capabilities are notoriously weak among small media content and software firms (Davis, Vladica, and Berkowitz, 2008). Media cluster policy needs to address this challenge. This might be accomplished through executive workshops and seminars with invited speakers, preparation of case studies, and assistance in recruiting seasoned executives from high performing firms in other clusters.

*Export capability* refers to the ability of firms to identify and reach distant markets that are large enough and dynamic enough to support growth. Secondary media clusters often must be satisfied with import substitution efforts and low levels of exports. A challenge to media firms in countries with relatively small national markets is the "cultural discount" - a product's loss of

economic value when crossing cultural borders (Davis & Nadler, 2009; Fu & Sim, 2010; Hoskins & Mirus, 1988). This discount affects the exportability of media products and therefore their profitability. Media cluster policies can improve the cluster's export capability by supporting the development of market intelligence, trade missions, participation in expositions and festivals, and international co-production arrangements.

***Business development capability*** is a corporate entrepreneurial practice to extend the firm's value-creation activities into areas that are relatively new to the firm (Davis & Sun, 2006). It includes competences for opportunity recognition, idea generation and qualification, new product development, commercialization, licensing, or acquisitions. Business development capability is notably required by firms that participate in the production and delivery of integrated solutions, either as members of a business consortium or as integrators, as may be the case in the digital media sector. Media cluster policy can support the improvement of business development capability through specialized training and mentoring programs and through the establishment of business development networks and missions.

***Branding*** refers to the capability to communicate the cluster's value proposition with strength and clarity. Its effectiveness is measured by brand recognition - familiarity with the cluster and with its offerings. A cluster's branding capability can be improved by identifying and communicating the cluster's areas of business, creative, and technological strength, and its unique value proposition (which can include such factors as urban amenities, weather, travel time, quality of secondary schools, ranking among competitors on various scales, cost of housing, and so forth).

***Leadership and operational capability*** refers to the ability to get things done at the cluster level on behalf of the cluster and its members. It includes communication, advocacy,

organization of events, networking, strategic planning, foresight and strategic intelligence, project development and execution, cluster monitoring and assessment, consensus building, policy engagement, and overall cluster governance. Although industry clusters often have informal governance processes based on central firms or public institutions, a cluster's operational capabilities are usually based in formal dedicated cluster organizations that can offer services to their members and also represent the cluster to outsiders. Agile and effective governance of media industry clusters is hindered when industry subsectors are organized into multiple distinct trade associations, labour unions and craft guilds, public programs, and policy frameworks such that it is a challenge to engineer collective action on behalf of the cluster as a whole.

*Public policy capability* refers to the ability of cluster players, especially subnational public organizations and private groups with a cluster mandate, to coordinate policy interventions and implement policy solutions. By virtue of their bundling of policies and programs from across horizontal and vertical jurisdictions, which can lead to 'congestion' of the state (Burfitt and MacNeill, 2008), cluster interventions pose significant management and governance challenges. The media policy environment “grows more complex with each passing year and each new technological innovation” (Napoli, 2001: 1). Although there is wide variation among national media regimes, in no case does a single unified policy framework apply to telephones, broadcast, cable, Internet, advertising, motion pictures, and print. Media clusters therefore must operate in a complex multi-jurisdictional policy framework requiring multi-level governance (Shaver & Shaver, 2006). As noted earlier, practically all of the key policy domains affecting media clusters fall under the jurisdiction of senior governments. These domains include: the intellectual property regime; regulation of the telecommunications and broadcasting

system in matters concerning foreign investment, ownership, licensing of services, and business practices such as Internet traffic shaping; regulation of capital markets; establishment of labour standards; public service broadcasting; and delivery of educational services, R&D support programs, and provision of specialized public sector technical, standards, and R&D-performing institutions.

It is a challenge for any government to develop coherent and consistent policy across all media industries and technologies. Media policymakers currently face four main sets of issues:<sup>6</sup> how to ensure successful transition to a digitally converged media system; how to understand and respond to the cultural ramifications of vastly expanded transnational circulation of media products; what standards should apply to national media content, ownership of the media, and concentration of media ownership; and what are the appropriate civic, cultural, and public service roles of media and how can they be secured. The way these issues are addressed and resolved at the national level will necessarily have implications for media clusters and media cluster policies. For their part, media cluster activities mainly involve delivery of some services to cluster members, animation and coordination of activities within the cluster, facilitation of cluster's external commercial linkages, and management of the cluster's policy linkages.

### **Conclusion: media clusters and the foundation principles of media policy**

Approached as engines of wealth creation, media clusters raise management and policy issues that are analogous to those of other industry clusters. While it is not entirely straightforward to apply cluster principles to an industry that specializes in the production and distribution of

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<sup>6</sup> See *inter alia* Benkler (2006); Freedman (2008); Hutchison (1999); and Napoli (2001).

experience goods, prevailing cluster policy models are sufficiently flexible to accommodate media industries, and much can be learned by media cluster policymakers from cluster development experiences in other industries.

Media industries have massive social and cultural spillovers that make them so substantively different from other industries, however, that most governments see fit to regulate them in the public interest. Modern democracies historically have regulated mass media, especially broadcasting, to protect and promote civic, cultural, and public values that ensure democratic deliberation and support national cultural sovereignty. The foundation principles of communication policy, as identified by Napoli (2001), are the public interest, marketplace of ideas, diversity, competition, universal service, localism, and freedom of speech; the purpose of promoting these values is to protect liberty, check government power, enhance the democratic process, provide community cohesion, and ensure that the truth is told.

The normative framework and the regulatory measures that many governments have put in place for mass media are being relaxed. The rise of internetnetworked broadband communication has enabled a massive increase in communication channels, radically reducing entry barriers to content production and distribution. The contemporary media environment contains a superabundance of choices for consumers, an apparently full spectrum of political opinion for citizens to consider, and a multitude of opportunities to interact and contribute. Thus, some argue, the policy objectives concerning diversity, pluralism, and democracy that were pursued in the period of mass media using various regulatory measures are being achieved through technological change and market liberalization in the contemporary period of broadband-based internetnetworked interactive media, allowing media industries to fulfill their dual economic and civic-cultural functions without need for further policy intervention. As Freedman observes, the

foundation principles of contemporary media policymaking "are based on an increasingly narrow and instrumental commitment to market forces as the central dynamic of contemporary communications" (2008: 78). Regulators have relaxed their oversight of media concentration and cross-media ownership, apparently motivated by concerns to lessen the present economic hardships of indigenous mass media firms or allow national firms to grow so that they can compete globally (Doyle, 2007; Napoli, 2010). For example, in Canada many public media support programs aim specifically at development of multi-platform media content for *broadcasters*, a move that implicitly endorses cross-media ownership among domestic media conglomerates and does not address the specific growth and competitiveness concerns of small indigenous digital media firms.

Recent commentary on media policy in a digital environment urges the reinterpretation of traditional media policy principles to support the development of "a broader conception of media pluralism that is not concerned only with consumer choice or specific issues like media ownership but more broadly with a more democratic distribution of communicative power in the public sphere" (Karppinen, 2009: 167). Cluster policy provides a way to apply national policies to specific local needs and circumstances, and media cluster policy has a largely unrealized opportunity to bring national media policy's longstanding foundation principles into the ambit of cluster policy alongside economic development objectives and apply them in local circumstances. This requires addressing the normative propositions about media value creation drawn from, and inspired by, national media policy.

Media clusters, especially ones encompassing broadcasting, the press, and motion pictures, are found mainly in larger metropolitan areas, regions with great social and cultural diversity, highly heterogeneous economies, and a variety of media organizations encompassing

the private for-profit media sector as well as the professional sector, the social market sector, the civic sector, and the public service sector (Curran, 2002). These latter sectors typically are ignored by media cluster policies, and they create economic and social value in ways that are usually unrecognized by innovation policy or cluster theory. Bringing normative media policy principles into cluster policy requires rethinking the usual "dependent variable" or expected outcome of cluster policy intervention, economic performance, and adding measures of diversity, pluralism, democratic engagement, or other public-good outcomes as proxy indicators of innovation in the public interest.

I am suggesting, in sum, to broaden the media cluster policy framework to address the normative dimensions of media policy regarding communication rights, citizenship, diversity, and localism. That few media cluster policies currently consider these dimensions of national media policy is an indication of how thoroughly media cluster policy has been subsumed under economic development-oriented innovation and industrial policy. Broadening the cluster policy approach from exclusive concern with economic development to encompass media's civic and non-commercial cultural functions would bring the full spectrum of media impacts, effects, spillovers, innovation, and normative propositions regarding media value creation into media policymaking at the cluster level, concurrently enhancing economic welfare and civic-cultural well-being in the cluster's jurisdiction.

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