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Mobile Technology and Canadian Commercial Radio:
Friends or Foes?

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Mobile Technology and Canadian Commercial Radio: Friends or Foes?

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Under the supervision of
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Abstract

A defining aspect of our era is the continuous migration of media consumers toward alternative distribution platforms. These are used to access content formerly available only in traditional media's original format. The intensification of wireless networks and the increasing portability of content, music content in particular, has resulted in radio listeners reverting to wireless delivery technologies to access, discover, listen to, share and store music. This empirical research project explores the consequences of mobile technology on commercial radio by looking at the ways in which mobility is altering the relationship between commercial radio and music fans.

The specific research objectives of this study are threefold: 1) to better understand the increasing role of the mobile industry and of wireless delivery technologies as purveyors of music; 2) to explore their repercussions on the viability of commercial radio; and 3) to identify the appearance of effects on the habits and expectations of radio listeners.

Table of Contents

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Duc in Altum! Vers les sommets!

Chapter 1: Introduction

Over the last 600 years, society has taken leaps and bounds in the realm of communication technologies, from the invention of the printing press and other mass media to the global reach of Internet. But, as much as we have discovered new ways to facilitate and speed up our ability to deliver information, we have also found ways of controlling who can say what, when, and where.

It goes without saying that radio broadcasting and mobility are two terms that go hand in hand. Radio technology, as we will see, has evolved since its inception at the dawn of the 20th century. However, its evolution has not always been an easy one. From the invention of television to the creation of the music video, Walkmans and now MP3s, the radio industry has faced its fair share of business challenges and has constantly had to reinvent itself in order to stay current. As long as its listeners were still tuning in and listening to what was playing, the radio industry could produce ratings, sell advertising, and subsequently, run a viable, profitable business.

Canadian Reginald Fessenden is considered by many to be a radio broadcasting pioneer. In 1900, he managed to broadcast the human voice as a radio signal between two towers on a site in Washington, D.C. A year later, high above what is today known as Signal Hill in St. John's, Newfoundland and Labrador, Italian Guglielmo Marconi engineered the very first transmission of a

coded message across the Atlantic Ocean (Bélanger, 2005: 130). However, it would still be a few years before the first radio program was aired.

While Parliament only passed its *Canadian Radio Broadcasting Act* in 1932, a few years earlier, in 1929, the Canadian National Railway radio network was already broadcasting live and local programming in various parts of the country, at different times during the day (Canadian Communications Foundation, 1998). From its humble beginning, Canadian radio was always about discovery—about sharing new information and factoids with the public at large in the hope of informing and entertaining its listeners. It was also about connecting this vast nation, from ocean to ocean to ocean, to share stories across regions and to unify its people.

Interestingly, radio broadcasting was not about music at first, but was instead concerned with reporting local happenings and news. It was only in the 1950s that format radio was created, with the introduction of 24-hour music stations that appealed mostly to younger listeners (Canadian Communications Foundation, 2000). Soon enough, major markets had a choice of radio stations with a variety of programming to appeal to the interests of its different listeners. According to the father of Canadian public broadcasting, Graham Spry, "functional democratic societies require independent media" (Smith, 2000). Indeed, if it were not for the lobbying of Mr. Spry, some argue Canadian broadcasters such as the CBC and CTV would not exist today. The phrases he

popularized, such as "the state of the United States" pointing to the threat of US media, are celebrated today as an early call for government intervention in the development of Canada's radio system.

Fast-forward to today, format radio and specialty television have become the norm with network satellite technologies beaming and Internet radio stations streaming hundreds of different stations of various genres into our homes, cars and offices. In fact, the last three decades have been marked by the combined evolution of traditional radio and television broadcasting and the emergence of mobile devices, most stemming from once-fixed technologies. For instance, the original transistor radios were boxy and heavy. Today, digital radios are installed in vehicles or people simply tote them around with them, embedded in their mobile phones. Arguably, the release of Sony's original Walkman cassette player constituted the most significant milestone for the mobility of recorded and live-to-air music (Sony, 2008). Similarly, the telephone was once an archaic arrangement of wires and burdensome equipment that transmitted voice data over long distances more conveniently and cost efficiently (AT&T, 2008). Not only was equipment required, dispatchers and telephone operators were hired to connect calls with other exchanges and to ensure the basic functionality of the telephone network.

Today, the telephone is reliable and can provide a very high-quality sound. It has evolved into one of the most sophisticated mobile communication devices,

capable of transmitting live conversations and entertainment content to and from anywhere in the world. What is more, mobile phones come equipped with a myriad of features from global positioning systems to novelty applications for smart phones, such as the Apple iPhone. Even traditional media, like radio and television, are now being deployed on several mobile platforms, such as the LG TU915 VU offered by Rogers Wireless. Mobile devices are, in some ways, untethering the Internet and traditional media, giving users instant access to a worldwide network of knowledge and amusement at their fingertips.

As Carolyn Marvin states in her work *When Old Technologies Were New*, even in the late 19th century, "new electric media were sources of endless fascination and fear, and provided constant fodder for social experimentation" (1988: 4). Today, more than ever, we continue our fascination with new trends in technology and with understanding how they will impact our daily lives. In her longitudinal study of the telephone and electric light, Marvin tells us that the telephone was seen by many as a simple and seemingly natural shift to a newer version of the telegraph—much like today's shift from wired Internet connections to high-speed, wireless connectivity. Though initially only used by the elite and by businesses, the telephone soon spread across North America and became a common household item.

Similarly, a defining aspect of our era has been the continuous migration of traditional media consumers toward alternative distribution platforms. These

are used to access content formerly available only in traditional media's original format. The intensification of wireless networks and the increasing portability of content, and music content in particular, have resulted in radio listeners reverting to on-demand and mobile technologies to wireless delivery technologies to access, discover, listen to, share and store music.

However, since the radio industry's business model primarily rests upon audience shares, a change in its audiences' consumption behaviours can constitute an important challenge for the future of the Canadian commercial radio industry. According to CBS radio president Dan Mason, "The growth in media use is clearly growing on the Internet, and growth of advertising dollars is also migrating to the Web" (McClellan, 2007). In the past decade, as listenership has been in steady decline (Robertson, 2007), it has become increasingly more challenging for the radio industry to compete for advertising dollars, putting its viability at stake.

Over time, radio has been gradually losing listeners to on-demand and portable digital media (Statistics Canada, 2007). It is in this context that the present thesis attempts to understand the radio industry's place within the Canadian new media environment. The specific research objectives of this study are to better understand the increasing role of the mobile industry and of wireless delivery technologies as purveyors of music; their repercussion on the viability of commercial radio; and their effect on the habits of radio listeners. Several

questions come to mind: what is the state of the current commercial radio broadcasting industry in Canada? On which alternative platforms does it already operate? Where are potential areas for growth? What is the likelihood that the traditional commercial radio industry will remain viable as it moves forward? What needs to be done to ensure its relevance? These many questions will be addressed by conducting extensive qualitative data collection, including in-depth interviews and media scans. Following a review of key literature and theoretical issues, an analysis of key research findings will be undertaken in order to better grasp the scope of the main research question. Conclusions will then be drawn in order to make certain inferences.

By exploring a number of points of confluence between wireless and radio technologies, this empirical research project explores the consequences of mobile technology on commercial radio and its listeners, the business potential of mobile content and the extent to which regulation can influence the fate of both radio and mobility. It is in this context that this thesis explores the following key research question:

1.1. Research question

What role do emerging delivery technologies play in transforming the relationship between traditional media and their content? More specifically, in

what ways are mobile technologies,[1] such as mobile phones, MP3 media players and Wi-Fi devices, transforming the relationship between commercial radio stations[2] and music listeners?

[1] For the purpose of this study, the term "mobile technology" refers to mobile phones and smart devices (such as BlackBerries); it excludes satellite radio and digital audio broadcasting (DAB) services. The terms "mobile" and "wireless" are also used interchangeably.
[2] For the purpose of this study, the term "commercial radio" refers to music format radio stations and excludes talk radio and news radio.

Chapter 2: Literature Review

This chapter presents a series of concepts related to the field of communications, including a range of theory as well as recently published articles and other topical qualitative data. Theoretical issues such as social constructivism and technological determinism will be examined. In addition, a review of current literature on network and wireless technologies, as well as the business potential of mobile content and regulatory considerations facing the mobile industry, will be conducted. The chapter will be brought to a close with a thesis statement.

2.1. Social constructivism and technological determinism

Since this paper is interested in understanding the ways that technologies, such as the radio and mobile phone, are experienced by their users, concepts like social constructivism, as first coined by Peter Berger and Thomas Luckmann (1966) will be studied. Social constructivism seeks to explain how our perception of reality is structured according to our daily actions, our ideas and our perceptions of others. Simply put, our social reality is created by groups and individuals.

The present research aims to shed light on how technology has come to influence our social practices and vice versa. The social construction of

communication technology theory suggests that it is not technology that shapes society, but that rather it is society that shapes technology (Fulk, 1993). Through our actions, our perceptions, and our ways of using communication technology, social constructivists argue that we mould the future of technology.

In fact, there exists a large body of scholarly literature regarding the social history of technological change in the communications domain. Many academics question the socio-dynamics of technology today by studying and examining earlier technologies that are now considered traditional, and how the latter affected the social situation in their time. For instance, Marvin (1988) examines the first public deployment of electricity and its consequences on society in the late 19th century. What is most interesting about Marvin's research is that she goes on to describe how electricity was used by various groups of people and how they adapted this new technology to their own situation.

In much the same way today, new media offers flexibility and adaptability to its users' individual desires. Such personalization is fundamental to radio's continued success. In order to prosper, the radio industry needs to find ways to utilize wireless technology as a new conduit for its content, and in doing so, give its listeners the ability to discover and share content.

A study by the Government of Canada, released in March 2008, shows that 91 percent of Canadian Internet users have access to a high-speed,

broadband connection from home; but, only 1 percent reported having accessed a high speed network via mobile phone or PDA (Agriculture and Agri-Food Canada, 2008: 5). The study, both qualitative and quantitative in nature, looked at the awareness of Canadians with regard to Web 2.0 technologies, such as podcasts (recorded, on-demand audio content) and social networking sites, such as Facebook and MySpace. Of note, it reports that 47 percent of Canadians said they were aware of social networking sites and reported using them on at least a weekly basis (Agriculture and Agri-Food Canada, 2008: 11). Though the study confirms that Canadians are generally aware of access to Internet via fixed connections at home, it also suggests that most Canadians are generally unaware that their mobile phones and PDAs also give them access to a data connection via wireless technology.

While mobile content is still not at a mature stage, a surge in mobile data service usage is predictable, if not already in progress. With the mid-2008 launch of Apple's iPhone on the Rogers Wireless network, already tens of thousands of Canadian mobile users are now experiencing the potential of the wireless Web (Rogers Wireless, 2008). In fact, according to *The New York Times*, 75 percent of iPhone users are operating their mobile devices for both its voice transmission capability and its digital music player function. The article goes on to credit unlimited download plans sold with the iPhone as its main ally. As MP3-equipped phones become easier to use and more widely available, the author of the column suggests that users will start using their mobile phones increasingly for

music content (Wilson, 2008). In addition, users are now reverting to streaming services to receive their music and entertainment content. If there is a future for mobile content, as some studies and surveys predict, it is key for the radio industry to take note of this trend, as it represents a shift in the future of music discovery and distribution for its listeners and a threat to their role as a source of music.

For instance, CBS Radio announced the creation of a new media player called Play.It (FMQB, 2008 a). This player allows users to customize their very own radio station according to their personal taste and musical preferences. Another example of this includes an initiative recently launched by CBS Radio. The project, called Last.fm, represents an important cross-promotion of products and allows listeners to add new custom content to their CBS Radio and Last.fm audio streams. In other words, the project allows users to create a personalized radio station online that will play only the songs and artists the user chooses. For instance, "KROQ will soon enable you to create 'my KROQ', powered by Last.fm" (Ramsey, 2008). If the model adopted by CBS Radio proves to be successful, it will be a very telling starting point for other radio broadcasters.

In the interest of balance, the proposed thesis also looks at the theory of technological determinism. A technological determinist would argue that it is not human action that moulds technology, but instead technology that determines human action (Marx and Smith, 1994). In contrast to Fulk, Marshall McLuhan

(1967) believed that technology shaped the world and how it is lived in. His phrase, "the medium is the message," is just one example of this. McLuhan's belief that technology affects the social perception of the world is a concept that still resonates for many today.

Similarly, researchers Burnett and Marshall put forward the idea that technology determines users' habits. Indeed, technological determinism is a theory "used to describe the power of technology over a culture and is very useful in understanding the current power of the Web and where that power originates" (2003: 9-10). For many theorists, such as McQuail, "technological determinism often highlights inevitability around technological change" (1994: 107). In direct opposition to social determinism, technological determinists believe that the omnipresence of technology makes it unavoidable for technology to define social relations.

Perhaps it is the networked nature of 20th century technology that makes its impact so widespread. In the following section, networks and wireless delivery technologies are explored. Special interest is paid to possible changes in the relationship between music listeners and radio networks, caused in part by the intensification of wireless networks and the increased portability of music.

2.2. Networks and wireless delivery technologies

One of the distinguishing features of most radio conglomerates is their presence in multiple markets and their ability to create brand recognition across vast territories with immediate reach into thousands of households. The intensification of wireless networks and the growing portability of content have contributed to the evermore pervasive nature of media today. For instance, the Astral Radio network, which acquired Standard Radio in the fall of 2007, now operates a total of 82 French- and English-language stations across Canada, reaching over 9 million Canadians weekly (Astral Media Radio, 2008).

In recent years, a trend towards media consolidation has highlighted some of the features of these networks. In his work *Rise of the Network Society*, Manuel Castells (1996) lays out his vision of a network society and reinvigorates the concept of technological determinism as presented by McLuhan (1967). Castells notes "for the first time, the capitalist mode of production shapes social relationships over the entire planet" (1996: 502). While discussing the social consequences of networks, he states that they have also allowed for important shifts in power. For example, whereas content available to consumers was fixed a decade ago, radio and television audiences can now choose from hundreds of stations, channels and websites when and where they want.

Focussing on the information economy, academics such as Andrew Shapiro (1999) and Yochai Benkler (2006) argue that network technologies, such as the Internet, have helped democratize society, and that the economy is no longer solely focussed on producing goods, but rather on producing information. Indeed, Benkler and Shapiro both present a technological deterministic point of view, in the sense that their presentation of information technologies suggests that individuals will have no choice but to adopt the use of newer technologies in order to move forward.

As Tapscott and Williams state, in their book *Wikinomics: How Mass Collaboration Changes Everything*, "profound changes in the nature of technology, demographics, and the global economy are giving rise to powerful new models of production based on community, collaboration, and self-organization rather than on hierarchy and control" (2006:1). It is in this train of thought that Benkler and Shapiro suggest that, given the radical power shift brought on by the Internet, we break away from the past two centuries' industrial economy, and make way for the rise of a new social economy of information and knowledge production.

Benkler and Shapiro are suggesting that the Internet and new technology have brought on a radical shift in power base from corporations to users. Users are no longer limited to one or two channels; rather, they are presented with a plethora of content and platforms that they are free to consume at their own

leisure. Consequently, as much as users spend their money, they now have the choice to spend their attention on the information products of their liking.

Shapiro goes on to claim that "the control revolution, in fact, has some of the texture of a subtle historical shift such as the agricultural revolution or the industrial revolution—not in the sense that it will be centuries in the making, but because it may emerge undetected" (1999: 11). He later warns "we must adjust our institutional environment to make way for the new social practices made possible by the networked environment" (1999: 58). Similarly, Benkler (2006) believes we are witnessing a radical shift, the emergence of a new pop culture not produced by the industry, but rather, created by consumers—or "prosumers," as Tapscott and Williams (2006) call them.

Recent studies predict that over the next three years, as much as 30 percent of paying cable TV subscribers will cancel their traditional cable services, opting instead to watch television content online (Walsh, 2007). Similarly, much like radio listeners are shifting to online content, the above-mentioned study demonstrates the immense power of the user in altering the way content is delivered and consumed, as they increasingly want to choose what they listen to and when, where and how they listen to it.

Simply put, one cannot ignore the importance of networks, their control mechanisms, and the ability of individuals to personalize what they access, share

and purchase. While consumers are adopting wireless technologies to access content wherever they are, they are also using them to connect with one another in meaningful ways. For instance, social networking sites have grown exponentially in the past two years, creating vast virtual networks of individuals across the planet (eMarketer, 2008). Most mobile smart phones and wireless devices, like the BlackBerry, the Nokia N95 and the Samsung Instinct, are likely fuelling this trend, as social networking sites such as Facebook and Bebo are increasingly making their sites accessible wirelessly, void of distance and time constraints. In fact, today, many social networking sites are even enabling users to discover, purchase, and share music and other content using text messaging or WAP browsers (Baig, 2007). Furthermore, much like Last.fm discussed earlier, some sites have even begun to allow customers to create and broadcast their very own personalized stations, making the customer the DJ and permitting them to listen to and share only the music that interests them most (Devillard, 2008). This move towards customized playlists is evidence of a rising consumer desire to receive personalized content, something that mass media, like radio stations, are currently ill-equipped to offer.

Of specific interest to the radio industry, a study by Arbitron and Edison Media Research published in March 2008 "estimates that 33 million Americans age 12 or older listen to a radio station over the Internet during an average week, up from 29 million listeners one year ago" (Webster, 2008). To complement this movement, tech-friendly businesses have begun offering free wireless data

access, as long as you read their ads or buy their products. For example, major chains, such as Starbucks and McDonald's Restaurants, have partnered with AT&T to offer up to 2 hours of free wireless Internet service in its United States locations. Other offerings include subscription access to any of AT&T's 70,000 hot spots worldwide (White, 2008). Similarly, Wi-Fi connectivity is now available at a cost on most Via Rail trains and select Air Canada flights within Canada and the United States (Air Canada, 2008). According to *USA Today*, wireless connectivity is even available on public transit in more than 20 cities in the United States (Kurtzman, 2008). This movement towards the omnipresence of mobile access has gained even more traction with Chrysler offering UConnect, an innovative technology turning all of its 2009 models into moving Wi-Fi hotspots and allowing passengers to surf the Web and stream music (Bensinger, 2008). The rationale is simple: by offering instant and free access to content, these businesses are looking to enhance marketing opportunities and facilitate impulse purchases anywhere and "everyware" their customers are located (Greenfield, 2006).

Likewise, the intensification of wireless networks can be seen in cities and municipalities across the world. From the Asian Pacific to North America, large urban centres are setting up wireless networks using Wi-Fi and Wimax technologies to better enable their citizens to connect to the Internet from their living room or from their local park bench. By building these so-called digital clouds and installing wireless routers throughout their communities, large urban

cities like London, Paris and San Francisco are leading this trend. However, not all have been successful. In fact, Earthlink, a company specialized in building wireless network infrastructure, announced it was cancelling Wi-Fi projects in several American cities (Archer, 2007). While Earthlink was able to find interested partnering cities, it was unable to find the appropriate business model to ensure the projects' viability.

In Canada, several cities, including Montréal, Ottawa, Toronto and Vancouver, have begun to deploy wireless networks. In most instances, cities used the infrastructure of its public utilities to build their networks. By installing transmitters to city street lighting poles, cities can "relatively cheaply and easily deploy wireless meshing technologies to blanket (entire neighbourhoods)" (Clement and Potter, 2008). In Toronto, for example, Toronto Hydro Telecom's (THT) wireless Internet network "proved to be a resounding technical success" (Clement and Potter, 2008). However, THT has been unable to expand its network outside of a 6-kilometre radius because of a lack of political will and differing government priorities. Operating the network as a public utility, Toronto Hydro Telecom could have provided high-speed wireless experience to most households in the network's radius for about $100 per year. As the authors point out, this would have represented significant savings for Torontonians of, on average, up to $400 annually. Presumably, this would result in lost revenue for Canadian Internet service providers (ISPs), such as Rogers Communications and Bell Canada.

2.3. Business potential of mobile content

As more and more listeners revert to the Internet and other distribution platforms to get their information, the business potential of mobile content and its consequences on the viability of the commercial radio industry are increasingly significant.

For online consumers, 38 percent of their total radio listening time is made up of listening to radio content through alternative delivery platforms such as online radio, satellite radio or others (FMQB, 2008 b). According to French radio station Skyrock, its online services are now pulling in more revenue that its traditional radio service, which generates an estimated $15 million in income alone (Lalande, 2007). In August 2008, BBC Worldwide announced its plans to offer an ad-supported music service, in which streaming content would be offered free to users and other content would be offered on a pay-per-download system. While the service would be largely free for users, much like conventional radio, the production fees would be absorbed by advertising revenue. It is no surprise that, according to some, the future of commercial radio is "off the air."

Increasingly, consumers are showing a keen interest in "pull" technologies, rather than in the "push" technologies of yesterday[3]. "Radio has been raking in tons of new revenue from Internet, mobile, webcasting and pre-roll commercials to the tune of 18 percent last month alone." In the meantime, "traditional on-air national business is down 17 percent and local is down 8 percent" (Del Colliano, 2008 b). This does not explain, however, where radio listeners are going for their music. If trends in the Japanese market are a sign of things to come in North America, one could conclude that radio listeners are simply plugging into their mobile phones. The Recording Industry Association of Japan recently reported that Japanese music download sales to mobile phones increased to 68 billion yen ($680 million) in 2007 alone, up almost 41 percent from the previous year (Blair, 2008). In fact, "what we're finding is there's a huge move of people giving up their land line service altogether and using cell phones exclusively," said Allyn Hall of In-Stat (Sarkar, 2007). With a surge of people buying mobile phones, most equipped with MP3 players, the former could quite possibly become the purveyor of choice for music, especially given the explosion of digital content in the past decade.

While many still do not use their mobile devices to discover new music, the potential is extraordinary. The *International Herald Tribune* wrote "the mobile phone is now the world's best-selling portable music device—even if most people don't play tunes on their phone" (Shannon, 2008). With phones equipped to

[3] A "pull" technology is one that allows the user to select the content that best suits their needs. A "push" technology implies broadcasters imposing limited content on the user, regardless of their preferences.

access, play and share music, consumers are just missing the last piece to the puzzle: the content.

In a recent publication, In-Stat reports that digital music downloads are expected to represent 40 percent of all music sales in just four years (Electronista, 2008). Interestingly, the study suggests that these sales will be legally purchased songs from music providers online. A report by M:Metrics states that 27.9 percent of smart device users listen to music from headsets attached to their mobile phones. For iPhone users, the number of listeners using their mobile device as an MP3 player jumps to 74.1 percent (Bruno, 2008). In keeping with this trend, according to a survey conducted by the Consumer Electronics Association in March 2008, "people planning to buy a phone within the next 6 months had the highest likelihood of subscribing to non-voice services with the exception of video" (Palenchar, 2008). However, much of this could change as consumers begin to feel the impact of the 2008 global financial crisis and ensuing credit crunch (Reuters, 2008).

As business opportunities for digital content continue to grow, an effective sales strategy is required to fully leverage its potential. According to Chris Anderson (2006), *The Long Tail* is a paradigm, used by corporations, according to which a critical mass of content—usually consisting of harder-to-find material—is made available to customers. The premise is that corporations are able to turn a larger profit by selling a small volume of niche products to a larger

pool of customers. The author argues that "with ubiquitous broadband, both wired and wireless, more consumers will turn to the celestial jukebox of music services that offer every track ever made, playable on demand" (Anderson, 2006: 170). Proof in point, a January 2008 report by Juniper Research suggests that revenues from the sale of mobile content across the world would rise from $20 billion in 2007 to more than $64 billion by 2012. Of this mobile content, Jupiter suggests the top three products will likely include music, games and video (Quintana Pearce, 2008). Similarly, eMarketer reported in January 2008 that music sales via online and mobile channels have risen from zero to an estimated $2.9 billion since 2003 (eMarketer, 2008).

The Long Tail represents an important contribution to the study of new media and its impacts on consumers' habits in the 21st century. In fact, his assertions provide valuable insight into the future of music and the desires of listeners to hear what they want to hear, when they want to hear it. An online survey of North Americans showed that "half of online Americans say AM or FM broadcast radio is either 'totally indispensable' or 'an important part of (their) life'" (FMQB c, 2008). The same survey went on to point out that 30 percent of those interviewed believed that local content was a benefit of traditional radio. While radio could focus on the local content niche, its challenge would remain the same: monetizing the venture. Today's abundance of information has made it hard to charge for it, since users are so used to getting their content online for free.

In the same vein, subsequent to *The Long Tail*, Anderson published a column entitled the *Economy of Free*. He explains that by using free products to cross-subsidize others, the cost of products themselves are falling quickly—thanks in large part to industries now able to exploit the deflationary force of technologies to bring costs down.

Much like radio is "free to air," online publishers provide free information, in exchange for ad space and personal information of its users. In turn, they are able to cover their production costs and produce profits by selling advertising space, information about users to third parties, paid subscriptions, electronic commerce, and so on.

Anderson goes on to state that the "rise of 'freeconomics' is being driven by the underlying technologies that power the Web" (2008). He contends that as the cost of running websites and other mobile technologies continue to decrease, so should the cost for consumers. Much like commercial radio content, Anderson argues, digitized content will soon be free or close to it. For instance, in the second half of 2008, Nokia launched its Comes with Music service, which offers customers a one-year unlimited-access subscription to the Nokia Music Store, offering a rich catalogue of songs and streaming music (Nokia, 2008). In fact, Nokia is aggressively competing with the iPhone, offering a less expensive alternative to Apple's smart phone. In an article titled "What Nokia 5800 has,

iPhone doesn't", the *India Times* reports that Nokia will launch its 5800 Xpress Music handset in late 2008, which will come equipped with a one-year unlimited-access music subscription as described above (2008). Brand Republic also reported in March 2008 that Apple was considering a similar offering for its iTunes library (Sandison, 2008); Apple has since denied this. In addition, Sony BMG and Warner now offer a monthly download service to music listeners (Quinn, 2008). In the case of Sony BMG, it is the second major record label to sign a deal with Nokia to include its music with Comes with Music handsets (Masson, 2008). These transactions point to a trend in unlimited data services. However, it remains unknown what result it may have on commercial radio, as the model remains untested and its success will largely rely on its uptake by consumers.

That said, the behaviour of users has long been protected by the state, which governs the mobile and radio industries heavily. Be it the *Broadcasting Act*, the *Copyright Act* or the *Telecommunications Act*, the Government of Canada has the ability to influence the telecommunications industry or to simply let the markets decide and do their work with little to no government intervention.

2.4. Regulatory considerations

While governments regulated much of the broadcasting industry for the better part of the 19th century, most have chosen not to directly regulate the

Internet and most other recent communication technologies, such as VOIP (voice over Internet protocol), in part because of their porous nature and lack of geographic boundaries.

On the one hand, Benkler unmistakably asserts that the Internet democratizes and offers new "avenues of discourse around the bottlenecks of older media," (Benkler, 2006:271) and goes on to say that networks allow individuals to become creators, instead of simply remaining passive receivers. Shapiro (1999) reiterates on numerous occasions that it will require government and individual action to ensure the democratic potential of technology.

Shapiro goes on to emphasize that the Internet provides a new, democratic mechanism for individuals to have a greater say in the way they are governed. However, while the Internet liberates, he adds a caveat to his view by reminding the reader that the democratic features of the Internet need to be accompanied by proper regulation and policy measures to protect its democratic nature.

In Canada and most other industrialized countries, governments generally play an important oversight role with respect to the radio broadcasting and mobile industries (though most do not yet regulate content accessible via the Internet). While its regulatory power is far reaching, the Government of Canada, through the Canadian Radio-television and Telecommunications Commission

(CRTC), has the ability to influence what radio stations play, how much they play of it, and how much airtime they can use to sell advertising. In fact, the CRTC oversees all aspects of Canadian radio broadcasting. Through its public hearings and policies, the CRTC aims "to regulate and supervise all aspects of the Canadian broadcasting system, as well as to regulate telecommunications common carriers and service providers that fall under federal jurisdiction" (CRTC, 2008 a).

Alternatively, new media, including some wireless Internet and download services, have escaped government regulation with respect to content requirements. Benkler, along with several other cyber-libertarians, frequently points to the growing popularity of user-generated content and mass collaboration throughout his book, using Wikipedia as a prime example. "By lowering the capital costs required for effective individual action, these technologies have allowed various provisioning problems to be structured in forms amenable to decentralized production based on social relations, rather than through markets or hierarchies" (Benkler, 2006: 111).

To date, the CRTC has shied away from regulating new information and communication technologies that form the infrastructure for much of today's user-controlled and user-generated content. In 1999, the regulatory body rendered a decision to exempt content accessed by Internet or other forms of non-traditional broadcasting technology from Canada's *Broadcasting Act*. For more than a

decade, this decision has allowed many online radio stations to flourish and content distributors to avoid the regulatory burden of the Act. In December 2006, the CRTC published a report on the impact of new media on traditional broadcasting industries. It noted that it would intensify its monitoring of new technologies and their consequences for regulated broadcasting entities. However, the CRTC report once again concluded that the circumstances of the time still did not warrant a review of its 1999 decision to exclude new media from the Act.

However, one year later, the Commission decided to set up a New Media Project Initiative to more substantially evaluate the impact of new media on regulated industries (CRTC, 2007 c). In February of 2009, the CRTC will conduct a set of public hearings with respect to Canadian regulation of new media. The outcome of these hearings could significantly influence the future of new media in Canada. A decision to regulate new media content, as a whole or in part, would be a first for Canada.

On the wireless regulatory front, an important decision was made in late 2007 to open the Canadian wireless industry to more competition. The Minister of Industry committed to auctioning off a block of wireless spectrum, which would allow new players to gain entry into the Canadian wireless market. Advanced wireless spectrum is a frequency used by wireless providers to offer services

such as video, music and Internet access over wireless devices including mobile phones and smart devices.

In May 2008, the Canadian Department of Industry began to auction off 105 MHz of advanced wireless spectrum, opening up the Canadian wireless market to new players. A key feature of this auction is that the government reserved 40 MHz exclusively for new wireless service providers to buy into the Canadian market. The other 65 MHz was made available to all bidders. While bidding closed in early July, results were confirmed by the Department of Industry in August 2008. "Our goals for this auction are very straightforward: we want to help foster a healthy and competitive telecommunications market from which consumers and businesses will benefit the most," stated Industry Minister Jim Prentice (Industry Canada, 2008 a). In the end, a handful of new entrants won spectrum and are expected to start marketing their offerings in the next year or so.

In its March 2006 report, the Telecom Policy Review Panel noted that there are only three national wireless providers in Canada and that all three are also owned by large wire-line service providers. The Panel was of the view that this meant there was less competition in the Canadian telecommunications market than in the United States, where not all wireless carriers are also wire-line service providers. The report went on to urge the federal government to use

regulatory measures to provide an opportunity for new entrants to acquire spectrum and for Canadians to have an expanded choice of service providers.

In response, pundits expect the advanced wireless spectrum (AWS) auction to create up to 6 million new Canadian wireless clients, which could increase market saturation to 80 percent from its current 61 percent (Dabrowski and Egan, 2008). In addition, as radio frequency spectrum is a finite resource, the opening spectrum of this quality and quantity happens infrequently, generating a significant amount of revenue for the public purse. In 2001, an auction for 40 MHz of similar mobile spectrum generated $1.4 billion for 10-year licences. The 2008 auction collected well over this amount, surpassing all forecasts, and raised a total of almost $4.3 billion (Industry Canada, 2008 b).

While wireless competition is expected to increase, prices for mobile services are forecast to decrease. This has been the case in the United States, where several unlimited access data plans have started to appear. Lower prices will likely further feed consumer interest in mobile data content such as downloadable and streaming music. As for Canada's radio industry, lower prices will likely mean more competition for listeners as Canadians are drawn to new, more interactive mobile technologies that are equipped to offer a personalized music experience.

In fact, several studies released over the past few months have shown that wireless prices in Canada are not as low as they could be. As the CRTC noted in July 2007, the Canadian wireless penetration rate, at 67 percent of households, puts Canada close to last place in comparison with other countries of the Organisation for Economic Cooperation and Development (OECD) (CRTC, 2007 a). Studies conducted by the OECD and the SeaBoard Group show that wireless prices in Canada are higher than prices in other countries. For example, the OECD compared wireless prices in 30 countries and found that the service package most comparable to average use by Canadians was more expensive in Canada than in eight other countries like the United Kingdom, Sweden and Denmark. For other packages, Canada ranked 12th and 22nd (OECD, 2007).

Another study by SeaBoard Group (2007) points out that wireless rates in the United States and Europe, for either unlimited wireless plans or limited wireless data plans, are about half the cost of the same services in Canada. "Recent media reports have (...) found that wireless data service rates in Canada are almost twice the amount paid in the United States, Germany and the United Kingdom, where iPhones prices range from $60 to $68. A comparable service in Canada would cost between $133 and $160" (Industry Canada, 2007 a).

Canada is not the only country to manage its wireless spectrum through an AWS auction. A handful of countries—notably the United Kingdom, Australia and the United States—have taken measures similar to those being implemented

in Canada (Industry Canada, 2007 b). The approach is recognized as a best practice for spectrum used for commercial purposes, especially since only the government has the power to make radio spectrum available. According to Industry Canada, the 2008 AWS auction will be a key enabler for more market competition. While the measures being taken will ensure an opportunity for entry into the wireless market, whether national or regional operators emerge from this process will largely depend on the results of the auction, announced in August 2008, as well as new entrants' ability to broker deals with other carriers in order to ensure national coverage or, at the very least, coverage in each of Canada's major markets.

The Government of Canada is also considering making some important amendments to the *Copyright Act*. In its 2008 platform, the Conservative Party of Canada stated that, once re-elected, they would "reintroduce federal copyright legislation that strikes the appropriate balance among the rights of musicians, artists, programmers and other creators and brings Canada's intellectual property protection in line with that of other industrialized countries, but also protects consumers who want to access copyright works for their personal use." (Conservative Party of Canada, 2008). For many organizations, such as the Canadian Chamber of Commerce, this balance is necessary in order to ensure a competitive and fair digital marketplace, preventing users from copying content illegally instead of purchasing it from lawful online purveyors of music and other digital content (Weeks, 2008).

Under the proposed legislation, tabled in June 2008, the Canadian government aimed to modernize its original act to provide better protection for digital rights holders, but also more flexibility for users. For example, under current legislation, enacted in 1985, recording radio shows or music to listen to at a later time is considered to be illegal. What is more, even if a consumer legitimately purchased a music CD, it is presently illegal to copy songs from the CD to the same owner's digital media player or personal computer. These two issues were addressed in the updated *Copyright Act*, which made certain types of 'time-shifting' and 'format-shifting' legal for private use in Canada. The revised legislation died on the Order Paper when Prime Minister Stephen Harper announced the dissolution of the 39th session of Parliament in early September 2008; it is set to be reintroduced to the House of Commons sometime in 2009.

While the proposed legislation is seen by some in the copyright industry as controversial and restrictive, it will bring Canada in line with most other developed countries. According to Industry Canada, "as of May 2008, 65 countries have ratified or adhered to the World Intellectual Property Organisation (WIPO) *Copyright Treaty* and 63 have ratified or adhered to the WIPO *Performances and Phonograms Treaty*" (Industry Canada, 2008 c). While Canada has not ratified either treaty, most of its major trading partners already have, including the United States, the European Union and Japan.

This too could have important consequences for the radio industry, as it will legalize uploading of content from traditional media's original form, for private, non-commercial use. The effect on the radio industry, while still unknown, will be further explored later in this thesis.

2.5. Thesis statement

The various concepts, approaches and industry-based information presented above act as the foundation of the thesis. It is in this context that the following thesis statement will be explored:

Consumers of the 21st century know all too well how to manipulate cutting-edge devices to discover, download, upload and share music and other audio content. As music is the very essence of commercial radio, the industry is forced to innovate, yet again, in order to maintain its relevance and its viability in the current technological environment. It is in this context that this research project seeks to explain in which ways mobile technologies are transforming the relationship between music and those who listen to it.

Chapter 3: Methodology

In this chapter, the research methods used in conducting the data collection phase of the thesis are outlined. An explanation of the process followed in analyzing the data collected is also given.

In order to make inferences about the characteristics and the perception of effects of research findings, a qualitative research design was adopted. Denzin and Lincoln define qualitative research as an interpretive and naturalistic process. They go on to state, "qualitative research is a situated activity that locates the observer in the world. It (...) makes the world visible" (Jackson, Gillis & Verberg, 2007: 426). As qualitative research follows a non-linear approach, it is guided by fewer rules and standard procedures when compared with statistical analysis. Consequently, it is difficult to specify key concepts to operationalize into variables. The data collected includes some numbers, but, unlike in quantitative research, it more often involves written or spoken words, facts, figures, symbols and images (Eid & Lagacé, 2007: 100); these ideas will be bridged with theory in a flexible and ongoing manner.

While a major strength of qualitative design is its detail-rich and raw narratives, the intimate connection required between the researcher and the subject studied is often what leads to a major fallacy of qualitative research—a perceived lack of objectivity. Jackson, Gillis and Verberg raise the importance of

rigour in establishing the reliability of qualitative research. Patton states, "at the heart of much controversy about qualitative findings are doubts about the nature of the analysis." He goes on to explain that quantitative researchers follow formulas and convention, "while qualitative analysis depends on the insights and conceptual capabilities of the analyst" (2002: 553). In essence, with quantitative analysis, the researcher uses precise measuring tools, such as surveys and sampling techniques, to determine causality; with qualitative research, the researcher is the tool.

3.1. Research and data collection techniques

For the purpose of this thesis, inductive reasoning is used. By looking at particular points of confluence between mobile technologies and the commercial radio industry, we make observations about the current state of the Canadian commercial radio industry and the technological environment in which it operates.

The constant comparative approach, also known as grounded theory, was used in the analysis of research data. As developed by theorists B. G. Glaser and A. L. Strauss (1967), a variety of data collection methods are used to collect information. The researcher then cross-references the data for patterns such as differences and similarities. The intent is to explore the playground of the research topic through two key collection methods: media scans and one-on-one

interviews. These various data collection techniques, along with diverse types of analysis techniques and different sources of data, allow us to triangulate research findings. Upon completing the collection of data, the information was compiled and analyzed in order to extract findings and potential conclusions. Rigorous data analysis techniques were used, including control measures such as noting patterns and themes, clustering cases, and making contrasts and comparisons. These "tactics for generating meaning" (Huberman & Miles, 1994: 245) allow the researcher to systematically reduce data and identify emerging relationships, ensuring the reliability and validity of the research findings. Most importantly, these techniques are reproducible and verifiable, and allow for drawing sturdy conclusions.

As outlined in the previous chapter, the goal of the study is to explore the appearance of effects of mobile technology on commercial radio by looking at the ways in which mobility is transforming the relationship between traditional radio and music listeners. The intent is to explore the playground of the research topic through two key collection methods: media scans and in-depth interviews. These different data collection techniques, along with the different types of analysis techniques and different sources of data, will allow us to triangulate research findings.

First, a comprehensive media scan of both commercial radio and mobility think tanks and opinion leaders was completed. This scan of the public

environment included a number of key Canadian and international journal articles, magazines and electronic databases related to the mobile and radio industries. Articles and columns published in the last 24 months were included in the scan and sourced accordingly throughout the body of the thesis.

Second, in-depth interviews with industry leaders were conducted. These interviews were used to collect data directly from industry experts in a face-to-face setting. By having detailed discussions with industry experts, the research project benefits from an extensive and personalized account coming directly, unfiltered, from the mouths of the four participants. The interviews were conducted only after the bulk of the industry scan and literary review were complete. This allowed the researcher to create a highly pertinent questionnaire, in line with the research objectives of the thesis, and to ensure that the appropriate interviewees were targeted from a number of relevant, national organizations. The interview findings were then summarized and analyzed for inclusion in the next chapter of the present report.

In order to recruit highly qualified and knowledgeable participants for the in-depth interviews, an unsolicited email was sent by the thesis supervisor to a list of four candidates, pre-identified as suitable for the purposes of the thesis. Interviewees were selected based on their rank within their respective organizations; we targeted exclusively senior management at or above the Vice President level. Also, we required participants to be leaders of national

organizations that offered services to a large scope of clientele in both English and French Canada. All four candidates solicited agreed to participate, which was a significant achievement, given their specific expertise in the areas of research related to the thesis, as well as for their reputation as leaders and visionaries within their respective industries. Interviews were conducted the first week of September 2008, in Ottawa and Montréal, and lasted no longer than an hour each.

In the end, we selected a senior management member of the mobile industry, as well as one from the radio industry. We also interviewed two regulatory experts, one from the Canadian Radio-television and Telecommunications Commission (CRTC) and the other from within the radio industry. Since the research question specifically seeks to understand the implications of mobile technology for the radio industry, musicians and composers are not directly represented. However, in order to make inferences about musicians, we interviewed a representative of the CRTC, which has as part of its mandate the responsibility of ensuring the promotion, the development and the viability of Canadian artists, including musicians, composers and producers. All four interview participants were identified and approached through professional contacts within the respective industries targeted.

3.2. Ethical clearance

As this project includes interaction with several human beings, ethical considerations were identified and an ethics evaluation was undertaken. A proposal for ethical clearance was prepared and submitted to the University of Ottawa Social Sciences and Humanities Research Ethics Committee, which included an outline of possible risks and benefits associated with the research. Measures to mitigate these risks were also proposed, such as obtaining the consent of participants and protecting the identity of interviewees by coding all research data.

Following the submission of the ethics proposal, the application, detailing the research approach and methodology to be taken, was examined by the ethics committee and considered for approval. The committee found that the proposed methodology met appropriate ethical standards as outlined in the Government of Canada's *Tri-Council Policy Statement* (2003) and in the *Procedures of the University of Ottawa Research Ethics Board* (University of Ottawa, n.d.). The proposal was subsequently approved and the researcher was given authorization to proceed with data collection.

As required by the ethics committee, and in order to fully protect the confidentiality and anonymity of all interviewees, the data collected—including tape recordings of interviews, transcripts, and written notes—will be kept in a

secure manner in the thesis supervisor's office on campus for a period of five years.

3.3. Risks and benefits

Before beginning the in-depth interview, participants were reminded that their participation in this study would present certain benefits and would allow the researcher to get a better sense of how both traditional commercial radio and mobile technologies are used as a source of music and other audio content. The potential benefits to this study are numerous and the potential positive impact of the research results easily outweighs any risks. Not only will the qualitative data collected help guide industry representatives and legislative bodies as they navigate into the future of the radio and wireless industry, it also gives the general public an overview of the current situation in Canada and of possible routes the radio and wireless industries may take to diverge or converge in the medium and long term.

In order to receive proper legal authorization from interview participants and meet a series of ethical requirements, participants were required to sign a consent form before the interview. This form outlined various ethical components, including a confidentiality and anonymity clause authorizing the researcher to disclose certain details of the participant's identity. The consent letter specifically indicated that researchers would not include the identity of participants or the names of their employers in the thesis. However, the interviewees' industry

affiliation, but not the specific company, and position title were identified as pieces of information that would be included in the final version of the thesis.

Interviewees were also informed of the other potential risks associated with their participation in the study. While participants received assurance that the information they shared would remain strictly confidential and that the data collected would be used only for the purposes of the research project, they were made aware of the associated risk to their confidentiality, especially since their position title and industry affiliation would be disclosed in the final thesis results. In order to mitigate these risks, the researcher coded and protected any other information or descriptors that could lead to the identification of the participants in the final research product.

Since revealing personal insights into the future of their line of work might cause participants to feel uncomfortable at times, interview subjects were allowed to withdraw from the study at any time or refuse to answer any questions, without suffering negative consequences. Those interviewed were also informed that their participation was voluntary and that they were under no obligation to take part. As an additional assurance, upon request, the researcher also committed to provide a copy of the thesis to interested participants via mail or in electronic format, once submitted and defended.

3.4. Data collection

Once underway, participants were asked to engage in a discussion on how they and their organization see the wireless and/or radio industries evolving over the next decade. The interviews included a series of questions pertaining to the use of both traditional commercial radio and mobile technologies as a source of music and other audio content. The interviewees' views on the possible impact of their organizations' business decisions on the habits of users were of special interest.

Another goal of the in-depth interview was to generate new ideas through an interactive discussion of broad themes, which included the concept of networks and wireless delivery technologies, the business potential of mobile content, the social habits of music listeners and, finally, regulatory considerations attributed to both the Canadian radio and mobile industries. More targeted, industry-specific questions included reactions to recent events and announcements in the radio and mobile industries, including the Government of Canada's Advanced Wireless Spectrum (AWS) auction in June 2008, the Competition Panel's report on the state of competition in Canada, and the CRTC's hearings on new media in the spring of 2009—as well as the unveiling of a series of new 3G smart phones during the summer of 2008, which included the launch of Apple's iPhone on the Rogers Wireless network in Canada.

In the next chapter, the research findings are presented. The data collected allows for the identification of emerging trends and links, made in the context of the thesis statement and the theoretical framework. This in-depth analysis of the data collected allows the researcher to test the relevance of the original research question and methodology.

Chapter 4: Research Results

In addition to the media scan presented in the literature review section, a series of four in-depth interviews were conducted with representatives of the Canadian commercial radio, mobile and regulatory sectors. As experts in their respective industry, the interviewees were asked to engage in a discussion on how they and their organization perceive the wireless and radio industries evolving over the next decade. Participants were chosen based on the need to address main areas of investigation in the thesis.

As such, the researcher chose to interview a representative of the Canadian Radio-television and Telecommunications Commission (CRTC), a representative of the Canadian commercial radio industry, a representative of the mobility industry, and a regulatory expert associated with the radio industry. While the names of the individuals and their organizations are not disclosed in order to ensure their confidentiality, the job titles and a brief sketch of each interview participant are outlined below:

1. **Senior representative of the CRTC**: A Governor-in-Council appointee reporting directly to the Chairman of Canada's broadcasting regulatory body; the interviewee has vast experience in the Canadian broadcasting sector.

2. **Senior representative of the Canadian radio industry**: This person is a senior management member of a major Canadian radio broadcaster, with several years experience in the radio industry.

3. **Mobility consultant**: This participant is a mobility expert with experience working for mobile carriers in both Europe and Canada. In addition to operating a consulting firm, the interviewee is currently working with a Canadian radio broadcaster to advise on how to best exploit mobile opportunities for its network of stations.

4. **Senior regulatory expert**: The participant is chief of regulatory and legal issues for a major radio organization.

Given the wide variety of questions asked and the dissimilar yet complementary roles of the interview participants, the researcher selected which questions he would ask each individual. As such, the questions were matched and adapted to better reflect the roles and expertise of the interviewees.

The responses have been edited in order to extract the main ideas discussed. This was required as almost five hours of interview data were collected. What follows, therefore, is a composite of the responses obtained. Wherever and whenever possible, the colloquial style of the respondents was

retained to preserve their unique character and tone. Direct citations are placed in quotes.

Questions and responses have been clustered into four main categories: 1) the role of radio as a purveyor of music; 2) the business realities of mobile content; 3) regulatory questions; and, 4) the way forward. Each category covers a number of the researcher's 14 questions and begins with a brief explanation of the question's relevance to the research.

4.1. Category I: Role of radio as a purveyor of music

Interview participants were first asked about their overall impression of the Canadian commercial radio industry, especially regarding its role as a purveyor of music to its listeners.

From a financial perspective, half of the respondents mentioned the strong financial position of the Canadian radio industry. The representative of the CRTC mentioned that the industry is especially healthy now, but increasingly consolidated. "Last year, there were seven major players in the Canadian radio industry; this year, we are down to five major networks. These major players are growing and applications for licenses are up," stated the interviewee. Indeed, the Canadian radio industry has been witness to a number of mergers and acquisitions in the 2000s. As mentioned on page 16, in 2007, Astral Media

became the largest radio broadcaster in Canada with its acquisition of Standard Radio. The transaction, worth $1.08 billion, added 52 new stations to Astral's network, which already included 29 radio stations in Quebec and Atlantic Canada.

As stated by the radio industry representative, the industry's strength is also demonstrated in recent revenue growth. Despite a decrease in listening hours, figures released in late August 2008 by Statistics Canada show growth of 6 percent to $1.5 billion for radio advertising revenue in Canada. According to CRTC data, Canadians listened to radio programming 18.3 hours per week on average in 2007, down from 19.5 hours per week on average in 2003.

There are also a number of challenges facing the Canadian commercial radio industry. Copyright restrictions, another topic that will be further discussed in this chapter, have placed a significant burden on radio networks' ability to shift their content between various delivery platforms. The regulatory expert that was interviewed affirmed that the Canadian radio industry is still robust, but noted "there are clouds on the horizon." Indeed, these clouds are the copyright difficulties radio is having in transferring its content from FM technology to the Web and to mobile platforms.

Another challenge mentioned by interviewees was the increasing reliance of consumers on mobile music platforms, like the iPod, for the consumption of

music. Instead of reverting to radio as a purveyor of music, more and more listeners are choosing to explore, sample, purchase and share their music through alternative delivery platforms like the Internet and the mobile Web. According to the mobility consultant, "the continued success of radio will depend on its ability to provide local content to its community, as opposed to music." For the regulatory expert, the future of radio will be about making local linkages, which means providing highly localized community information, like public service announcements, details on community events, and so on. "[Listeners] just don't get that kind of locally influenced, humanized information on the Web."

The regulatory expert goes on to present the Quebec radio market as an example of the way forward for the rest of Canada:

> If you want to know what is happening in radio, look at Quebec, and in five years, the rest of Canada will be there. More and more, French radio stations are focussing a lot more on exclusive content, a lot more on the spoken word. The Quebec market is a microcosm of the Canadian industry with its own unique challenges; we are already seeing a move to more talk and less music, and its working. In the rest of Canada, stations are still playing a lot of music—but this is changing. The fact is that you don't need to listen to radio anymore to discover new music.

This is one of several approaches that could be used by radio stations in response to the emergence of mobile music and alternative delivery platforms.[4]

[4] For the purpose of the thesis, an alternative delivery platform is defined as a distribution technology able to disseminate radio content in a technology other than FM frequency.

When asked if Canadian radio stations are responding adequately to this trend, representatives of the radio industry were quite optimistic, while the other two remained sceptical. However, all interviewees agreed that the threat of alternative delivery platforms, such as the mobile phone, was a relatively low priority for the Canadian radio industry. "Most large Canadian networks will wait to see what will develop in the United States and act subsequently. Then, the smaller players will likely follow suit. The North American radio industry is very conservative and rarely rocks the boat," said the representative of the CRTC. For now, as their bottom line has yet to be affected, the resurgence of mobile music is not much of a concern for radio broadcasters in Canada. For many in the radio business, the mobile phone is simply seen as another distribution mechanism for radio content.

According to two respondents, it is unlikely the radio industry will be able to monetize new media ventures in the near future. They attribute this to the industry's inability to find a suitable business model for sharing content with other platforms. "Many networks are talking with broadcasters to find a compromise to share content in a way that will benefit both the radio and mobility companies," stated the radio representative. "But, on a positive note, we are still early in the game; the sun is just coming up. Once [radio networks] strike the right balance with carriers or distributors, anything is possible." In other words, in order to respond to emerging technologies and platforms, the radio industry will need to

ensure that its content is available to listeners on complementary alternative delivery platforms.

The regulatory interviewee points to an unsuccessful online initiative launched in the early 2000s by one of Canada's biggest radio broadcasters. This online jukebox was created to allow users to personalize a playlist of songs to listen to via streaming technology on the Internet, much like what services such as Pandora, Slacker, Jango and Last.fm are doing today. The radio company had negotiated with copyright holders so that a percentage of subscription fees sold for the site would be paid to rights holders to compensate them for their content. However, a few months after its launch, the site was shut down because users weren't willing to pay for a subscription, presumably because the same content was already available via other Internet venues at no cost.

Participants were asked about the impact that they believe personal audio devices, like Apple's iPhone, are having on the radio industry as a purveyor of music. For three quarters of respondents, portable media devices have yet to cause problems for the Canadian radio industry. While they recognized the difficulties currently confronting the music industry, all four participants believe the radio sector will remain sheltered from similar challenges for some time to come.

For the mobility expert and the representative of the CRTC, personal digital audio devices and streaming music services are good platforms for radio to use to distribute its content and to add to its reach. "Radio is about human beings talking to other human beings about music and about local information; it's a great provider of content. While its delivery system is archaic, people today still go to radio for the day's news and for companionship," affirmed the mobility expert. "The major difference is that listening to FM radio is free, while listening to radio content on a cell phone costs the user a small fee. The incentive to spend money needs to be there." For the radio industry to thrive, the respondents suggest radio networks need to innovate and to ensure the delivery of value-added content to its listeners.

As stated by the radio industry interviewee, "there is lots of [content] out there, but radio seems to be resilient because its content is local and instant." Nevertheless, the radio representative did admit that the radio industry is having a harder time attracting and retaining listeners aged 12 to 17 and 18 to 24. According to Statistics Canada, this is likely due to the increased use of portable music devices. If the use of such devices is on the rise, one could assume there will also be an equal demand for high-quality, digital content. The following category will explore the business realities of mobile content.

4.2. Category II: Business realities of mobile content

Participants were asked to share their views on mobile content and its place within the Canadian radio industry. As seen on page 23, the *International Herald Tribune* reports, "the mobile phone is now the world's best-selling portable music device—even if most people don't play tunes on their phone" (Shannon, 2008). The following section was framed with the aforementioned quote in mind. Respondents were asked to react to it and to speak to its relevance for their respective organization.

Participants were asked about the uptake of mobile technology and what sort of impact it has had on the Canadian commercial radio industry. Originally, radio was designed as a "push" technology, with a set amount of content produced for any given station. Today, radio listeners can pull content from and push content to a number of stations and media, and listen to music on their own terms. In fact, with streaming music stations and new unlimited music services like Nokia's Comes with Music now available in the United Kingdom, consumers have an almost endless access to music on demand tailored to their individual tastes. Interviewees were asked to share examples of the consequences of this shift toward personalized mobile audio devices.

For the mobility consultant, mobile technologies have had a moderate impact on the radio industry. "It is a must-have for radio, but it is not what will

drive revenue. It is a value-added platform for the industry, and gives radio stations another tool to connect with their listeners, while also offering advertisers a larger breadth of advertising streams," said the respondent. "One consequence is that it allows better, faster feedback for radio stations. Greater two-way communication with listeners means better linkages, and gives the industry a better tool for measuring the pulse of the community." The respondent points to radio disc jockeys using text messaging to obtain instant feedback from their listeners, allowing them to almost immediately update their music and storylines to best reflect the desires of their audience.

However, the radio industry's biggest challenge in dealing with mobile technology, according to the mobility expert, is that it has yet to build a solid business case for using the technology as an additional delivery platform for its content. In Canada, the respondent suggests that it can cost up to $12,000 to send a single message to an audience of 10,000 listeners. "There is not an advertiser on this planet that is willing to pay so much to reach so few people. So, even though the technology is available, the cost to use it is simply not permissive," affirmed the interviewee. This participant predicts that prices will come down in approximately two or three years, as the mobility industry begins to see the entry of new mobile carriers as a result of the allotment of new spectrum by Industry Canada in the summer of 2008.

The CRTC respondent points to radio's lack of innovation in dealing with the challenges of mobile technologies. He attributes the radio industry's inability to think outside the box to its outdated business model, which relies heavily on advertising to remain viable. "The difference is that, in order to compete with mobile technologies, radio needs to provide a better quality product, something that mobile music stores do not offer. They can't charge listeners money for something they have always had for free," stated the CRTC representative. The regulatory expert suggests radio content need not be about music, but rather exclusive, niche spoken content like humour or cultural material. For the regulatory participant, it is this sort of content that is transferable and allows radio stations to offer unique and captivating content to its listeners across several different platforms. In order to do this, radio stations must consider a plethora of Canadian regulatory requirements, to which we now turn.

4.3. Category III: Regulatory considerations

As is the case in most countries, the Canadian government is free to choose different approaches to meet its goals for regulating the radio industry, and their use of new media. On the one hand, the government can take a laissez-faire approach, allowing the market to decide the fate of the radio industry. On the other, it can take a hands-on approach, for example, by creating research bodies or subsidies to help the industry flourish.

Interviewees were asked what role, if any, the Government of Canada should play in regulating how new media content is produced and distributed. For clarity, new media content includes any digital content available for download, for streaming on the Web or for simple consultation. In Canada, while the Department of Industry is responsible for regulating standards for technology and delivery platforms, it is the CRTC and the Department of Canadian Heritage that ensure content distributed is on par with the country's regulatory standards.

For three of four interview participants, regulating new media content was not advisable. The respondents were of the opinion that government should not have detailed rules that spell out what kind of content companies can or cannot offer. Instead, they believed there should be a heavy (if not exclusive) reliance on the industry, as well as competition in the marketplace to produce the best mix of services and pricing as dictated by consumer demand. Only the CRTC representative was of the opinion that the government should play a role in the regulation of mobile technology and its content. The respondent pointed to the CRTC's mandate to "to regulate and supervise all aspects of the Canadian broadcasting system, as well as to regulate telecommunications common carriers and service providers that fall under federal jurisdiction" (CRTC, 2008 c). As legislated under the *Broadcasting Act*, the CRTC aims to ensure the development and burgeoning of Canadian content in the country's broadcasting system.

To date, the Commission has exempted new media from its various policies and regulations stating that digital content has not achieved a critical mass and does not present a threat to the development of Canadian culture. The regulatory body last held a public hearing on the matter in 1999. In 2007, it issued a similar exemption for content received through mobile phones and personal digital assistants (PDAs). According to the CRTC respondent, a public notice would be issued in the fall of 2008 announcing the details of "a public hearing that will re-examine the question of broadcasting content in the new media environment." Indeed, the CRTC confirmed in October 2008 that it would hold a public hearing on February 17, 2009. The interviewee added, "It is at this hearing that the Commission will decide whether to maintain its two Exemption Orders for new media or introduce new requirements compatible with emerging new media platforms." As a result, the CRTC will re-open the debate of regulating new media platforms and content in order to ensure their compliance with the letter and the spirit of the Canadian *Broadcasting Act.*

According to the interviewee representing the radio industry, "networks already operate in an over-regulated environment. The government has no role whatsoever regulating new media." For the respondent, it is like comparing apples to oranges, in the sense that mobile carriers and Internet service providers (ISPs), unlike broadcasters, do not have obligations or a social commitment to Canadian culture. "The CRTC needs to understand that

broadcasters no longer operate in a closed system. [The Commission] should not start pushing the radio industry around with new tariffs and fees. It is not a level playing field anymore," added the respondent.

Much like the regulatory expert, the radio industry representative spoke of the multiplication of copyright tariffs and fees required to air music on radio stations. The latter went on to criticize the departments of Canadian Heritage and Industry for not communicating with each other and for failing to streamline the various laws and regulations the departments administer together. "Their lack of coordination has created a massive administrative and regulatory burden. A CD would cost $75 today, if its price increased at the same rate of copyright tariffs." According to the respondent, the problem is being caused by outdated copyright legislation that is no longer responding to the complexities of new media content and platforms.

In June 2008, the Government of Canada had tabled amendments to the *Copyright Act*. When asked about the federal government's review of the Act, both the radio and regulatory representatives agreed that the amendments were simply being proposed to bring the Canadian *Copyright Act* in line with World Intellectual Property Organization (WIPO) standards and that the revised legislation did not at all address the more serious issues facing the Canadian radio industry. For the radio representative, "the proposed copyright reforms would have had no impact on the problems faced by the industry. With so many

copyright tariffs to negotiate and pay for using songs, stations are playing less music." As a result, "talk radio is increasingly the backbone of commercial radio," affirmed the radio industry representative.

Similarly, for the regulatory expert, the incompatibility of the *Copyright Act* is an issue that needs to be raised at the CRTC's next public hearing. "Copyright issues are preventing the radio industry from adequately responding to the challenges of new distribution technologies," said the expert. According to the respondent, the *Copyright Act*, last updated in 1985, no longer reflects how Canadians purchase and share music. "Radio in Canada is innovative, but the industry is stuck with outdated laws. When you talk about putting music content online, all the tariffs involved and rights to be negotiated make it impossible," said the regulatory expert. "They want us to showcase Canadian content, but we don't have the rights or the mechanisms in place to do that in the new media environment. Songs need to be negotiated individually sometimes with up to four or five different rights holders." According to the respondent, the way the law is written now, it allows anyone to create an organization and apply for a copyright tariff. Originally, the respondent says there was only one copyright body in Canada: the Society of Composers, Authors and Music Publishers of Canada (SOCAN). Two decades later, there have been many others created, such as the Society for Reproduction Rights of Authors, Composers and Publishers in Canada (SODRAC), the Canadian Recording Industry Association (CRIA) and the Audio-Video Licensing Agency (AVLA). For the radio industry, the issue is

that stations are now required to pay more than ever for the songs they play. "When a station wants to export content to other platforms, it has to pay additional tariffs, sometimes up to 25 percent of gross revenue. Right holders each file a tariff through their respective copyright body and it can take several years before their challenge is heard by the Commission."

The respondent points to France's Société des auteurs, compositeurs et éditeurs de musique (SACEM), the French equivalent of Canada's SOCAN, as an example of how things could work for the Canadian industry. According to the regulatory participant:

> SACEM is the only copyright body in France. It splits up copyright tariffs amongst right holders; let's say 8 percent of revenues go to SACEM, a station knows right away how much a song will cost it, and as a consequence, the station can better plan. It permits some predictability to allow for business planning. In Canada, there is no such predictability. There is a need for a more streamlined process.

For both respondents, regulating new media in Canada would require an overhaul of copyright legislation to fix issues with copyright tariffs, as discussed above, and with the shifting of content from one platform to another without having to renegotiate copyright fees.

All three respondents against new media regulation indicated their intention to participate in the upcoming CRTC public hearing into broadcasting in the new media environment. However, they did not specify in what form their respective organizations would participate.

4.4. Category IV: The way forward

To wrap up, interview participants were asked to answer a series of questions on how they saw the radio and mobility industries moving forward in the next five to 10 years. Respondents were asked if they foresaw the possibility of cross-platform partnerships in the next decade and who they believed would benefit most from such an arrangement.

According to all of the interview participants, the next five to 10 years will not bring very much change to the radio industry. "History demonstrates that new technologies never completely replace traditional media. Radio is an incredibly resilient technology," said the senior representative of the CRTC. Much like television and the Internet did not replace radio, the respondent does not believe mobile technologies will signal the end of commercial radio industry.

"Commercial radio will stay—but the question is whether or not it will be broadcast in FM frequency or via other technologies," said the senior representative. It is yet to be determined whether or not radio will find value-added features in another platform, which would in turn require listeners to purchase new technology or new equipment. For the respondent representing the CRTC, "In-band on-channel (IBOC)[5] technology was not very successful when it was launched in the United States. The Digital Audio Broadcasting

[5] In-band on-channel (IBOC) is a method of transmitting digital and analogue radio broadcast signals simultaneously on the same frequency.

(DAB)[6] system has remained a technology only used in Europe. There is no business case yet, as both IBOC and DAB are too costly to deploy." Whether the FM frequency will be the distribution platform for radio in the future, all of the respondents did not know but the senior representative of the CRTC pointed to the mobile space as a strong possibility.

For the radio industry representative, the bottom line is that people rely on talk radio and on morning radio for all of their surveillance information. "Communities want to feel connected, to feel informed—and so, there will be a continued need for radio. People don't get that feeling through satellite radio or the Web," stated the interviewee.

From a consumer's perspective, both the mobility consultant and the regulatory expert think media companies will need to constantly adjust their products to better serve consumers, as Canadians will have so many other choices. "Perhaps the platform will change, but the need for weather, traffic, news, information will not. That hasn't changed for a century, and so it's not likely to change tomorrow morning. There will always be a need for local information," stated the representative of the mobile industry. From the interviewee's perspective, although little will change in the next five to 10 years, the radio industry will slowly transform itself to adapt to its audience over a longer period of time.

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[6] Digital Audio Broadcasting (DAB) is a digital radio technology for broadcasting radio stations. It is used in several countries, particularly in Europe.

Similarly, the regulatory expert interviewed believes the radio industry will be even more connected to the communities it serves over the next decade. However, the respondent believes audiences will become more fragmented and there will be fewer listeners devoted to radio, because they will have so many other ways to entertain themselves. "As one of many players competing for the attention of listeners, there is a continued need to ensure a value-added experience for our listeners," confirmed the interviewee.

When asked about potential partnerships between the radio and mobility industries, the senior representative of the CRTC believed that those who will succeed will be those companies that have distribution networks already in place. The respondent points to enterprises that are both broadcasters and mobility carriers, such as Bell Mobility, Telus Wireless and Rogers Wireless.

The mobility consultant believes that while the technology required for a partnership between radio and mobile carriers is available, there is a lack of will and cooperation between the two industries. "At the end of the day, it is the consumer that drives the demand. If customers ask for a better service and are willing to pay for it, both industries will be almost required to offer the service," affirmed the respondent.

When asked about partnerships, the regulatory participant thought it was a good idea and that the radio industry should aim for that. "Cable companies and

television networks have long enjoyed a successful partnership. Cable companies need the content produced by television networks just as much as television networks need cable companies to distribute their content. For radio and mobile carriers, it will be about striking a similar balance," stated the interviewee. Much like cable companies and television networks, in future partnerships, mobile networks would be responsible for distributing content produced by radio stations. An example of a similar partnership would be Astral Media's arrangement with Sirius Satellite Radio, in which the former provides its content to the latter, which is aired on two channels of the Sirius Satellite Radio network (CBC/Radio-Canada, 2005).

All four participants believed both industries would benefit equally from such a partnership. "Otherwise, it's not a successful partnership," said the radio industry representative.

When asked if the Canadian radio industry is adequately positioned to take full advantage of the new media environment in the next decade, two of the four interview participants believed the radio industry was in an ideal position to tackle the challenges and opportunities that lay ahead.

In contrast, the senior representative of the CRTC worries that the radio industry is not innovative enough, while the mobility sector is often first to reach outside the box. The respondent attributes this fact to the dissimilar business

models of each industry. For the mobile industry, customers pay monthly fees for their mobile service. Paying clients expect value for their money. For the industry, better service means more paying customers and more revenue. For the radio industry, listeners are essential, but they do not pay for access to radio. Unlike the mobile industry, the radio industry largely depends on its audience size for the magnitude of its advertising revenues.

According to the mobility expert, the biggest obstacle to face the radio industry will be ensuring the continued viability of its business model. "The advertising model used by radio networks has been around for decades and is deeply entrenched in the way radio stations do business," stated the interviewee. "It is much more difficult for the radio industry to take risks on changing the way they operate. However, audience fragmentation and on-demand, pre-recorded content will force the radio industry to re-think the way it does business in the years to come."

In the following chapter, an analysis and interpretation of the research findings are presented. This in-depth analysis of the data collected will test the relevance of the original research question and methodology.

Chapter 5: Discussion

From its origins, radio has, for the most part, been acting as a "push" technology carrying information and content to its listeners through the AM and FM frequencies. Its one-model-fits-all approach was limited to what, when and where listeners could tune in. Today, consumers have the ability to "pull" content, to discover, listen and share content on their own terms. This chapter provides a discussion of the research findings presented in Chapters 2 and 4, as well as assertions that respond to the original research question: what role do emerging delivery technologies play in transforming the relationship between traditional radio and its content? More specifically, in what ways are mobile technologies, such as mobile phones, MP3 media players and Wi-Fi-enabled devices, transforming the relationship between commercial radio stations and music fans? Recommendations are also presented. Most of these are geared toward the Canadian commercial radio industry as it navigates through the challenges of the new media environment.

5.1. Social constructivism and technological determinism

As Fulk's social construction of communication technology theory suggests, it is not technology that shapes society, but rather society that moulds technology. In contrast, researchers Burnett and Marshall put forward the idea that technology determines users' habits. Technological determinism is a theory

"used to describe the power of technology over a culture and is very useful in understanding the current power of the Web and where that power originates" (2003: 9-10). For many, "technological determinism often highlights inevitability around technological change" (McQuail, 1994: 107).

According to Fulk's theory, it is users' habits that shape the future of technologies, such as radio or mobile platforms. For example, wireless phones, which now offer a plethora of multimedia services, are not yet used to their full potential—presumably because consumers have not identified a need for such elaborate features on their mobile phones. In fact, a Canadian study suggests that 55 percent of wireless users are satisfied with the services offered on their current mobile phones (CWTA, 2006). The responses provided by interviewees in Chapter 4 support this fact. Many of the respondents stated that mobile technologies have had little impact to date on the habits of radio listeners and did not seem to have affected the relationship between radio and its listeners.

On the other hand, the regulatory expert interviewed predicts that the growing use of mobile phones represent "clouds on the horizon" for the radio industry. Indeed, as mobile phone technology is further refined and more practical wireless services are offered, a larger number of Canadians are poised to adopt the mobile phone for other uses, as a reaction to technological change.

Arguably, radio is unable to provide the tailored and personalized content that the consumer has become accustomed to receiving from mobile platforms operating in the new media environment. As a result, as suggest interview findings on page 65, radio audiences are becoming increasingly fragmented, as more and more listeners move to other platforms to discover, access and share music and other entertainment content. It is in this sense that the movement toward mobile phones can be interpreted as a technological determinist development and an eventual threat to the future of radio.

With millions of Canadians now using mobile phones, most equipped with MP3 players and headsets, these devices have the potential to become a dominant provider of music. According to our mobility expert, this point is further reinforced given the increase of digital content now available to consumers through Canadian wireless networks. As confirmed by both the radio and mobility industry representatives interviewed, the need for the radio industry to adopt alternative, innovative ways of delivering its content to listeners is imperative—this was the first central finding of the present research. Examples of such alternative delivery platforms, as detailed below, include: 1) mobile radio station streams; 2) podcasting/downloadable segments; and, 3) the use of social networking tools.

One approach to delivering content to users in alternative ways is to provide local radio streams to mobile phones. For now, in Canada, Rogers

Communications offers streams all of its radio stations to Rogers Wireless' subscribers across the country. Unlike Telus Mobility, which offers XM Satellite Radio content to its mobile users' handsets, Rogers Wireless offers its cellular phone subscribers the very same local radio content they could once only hear on the FM frequency within a limited geographic area covered by transmitting antennas. Users with compatible handsets are able to stream Rogers Communications' radio stations directly on their mobile phone, so they can listen to radio content produced by several radio stations across Canada. The importance of this pilot project was highlighted by the participant from the CRTC pointed to it as an example of a conglomerate taking full advantage of the synergy available among its various media holdings.

A new initiative launched in the United States in the fall of 2008, called Buy from FM, is aiming to equip every mobile device with FM radio tuners. The objective is to allow users to purchase songs they hear on the radio instantly on their mobile device. To date, Microsoft has signed on to the initiative. Its Zune 8 MP3 player offers the service thanks to song tagging available through 450 radio stations in the United States (Ad Age, 2008 c). Enabling consumers to make purchases immediately and directly on their mobile device likely increases chances a purchase will be made. Buy from FM also reduces technological barriers faced when transferring music from a CD or computer to their MP3 device.

Since so many other radio stations already stream to the Web, the same FM content they broadcast on the Internet could be formatted and streamed via mobile phone data applications, much like those sold in Apple's App Store. With 10 million downloads in its first three days of business, the launch of the App Store points to an untapped demand for applications that consumers can use to personalize their mobile experience and gain access to the content they are fond of. The television industry is already adopting a similar approach, offering content to mobile users. The MobiTV platform[7] offers more than 70 television stations to mobile phone users. The service is now offered in Canada by Bell Mobility, Rogers Wireless and Telus Mobility (Digital Home, 2008). As for online music offerings, Pandora, Last.fm and AOL Radio now offer free continuous streams of music to iPhone users via applications such as FlyCast (Benderoff, 2008). In a similar fashion, the Canadian radio industry needs to adapt itself to emerging delivery technologies and offer new ways of transmitting content to its audience 24 hours a day, seven days a week.

Another delivery method, which is already used by many stations, is to provide series of podcasts or downloadable segments—a recording of new or existing content—to users for download on to their mobile devices. According to Jerry Del Colliano, founder of Inside Radio, "podcasting is the next radio" (2008 a). In 2006, just 2 percent of Canadians cell phones users reported downloading music, on average six songs per week (CWTA, 2006). One year later, 20 percent

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[7] www.mobitv.com

of Canadians reported owning a music-enabled mobile phone (Nokia, 2007 b). Unlike traditional radio, users subscribe to specific podcasts that they can relate to and receive automatic updates via data connection. The advantage of offering podcasts, according to the mobility expert interviewed, is that radio can then personalize the listener's experience by providing bits and pieces of content that may be of interest to some, but not to all. By adopting such an approach to content delivery, the radio industry makes its content more flexible for listeners to use and easier to share.

Finally, radio stations can also better distribute their content by establishing a presence on platforms that listeners use to congregate and to share information, such as social networking sites. In 2007, the Economist Intelligence Unit reported that more than eight out of 10 13- to 17-year-olds and nearly three quarters of 18- to 29-year-olds had visited at least one social networking site. Moreover, 60 percent of people in their 30s and 45 percent of people in their 40s had done the same. With such interest generated by social networking sites, it is no surprise IBM announced in 2008 the opening of its IBM Center for Social Software, a focal point for developing software tailored to help companies build social networking tools onto the sites (Kerstetter, 2008). Even media conglomerates like MTV Networks and *The New York Times* are using the medium to extend their reach and to further display their content (Ad Age, 2008 b). Similarly, radio stations could partner with existing social networks to offer

content to online and mobile users or to run promotional contests for advertisers, targeting very specific segments of its audience.

As discussed in Chapter 4, by taking advantage of a larger range of delivery platforms, radio stations maximize their reach and improve their ability to deliver personalized content to their listeners.

Recommendation 1:

In order to better compete in the new media environment and to further distinguish itself among a sea of emerging digital music providers, **it is recommended that the Canadian radio industry explore adopting alternative platforms for delivering content to listeners, such as streaming radio to mobile phones through customized applications, offering downloadable segments or podcasts to listeners or partnering with social networking sites, both online and on mobile phones.**

In the following section, we will look at networks and wireless delivery technologies as well as their ability to receive better feedback from listeners.

5.2. Networks and wireless delivery technologies

Not only does the new media environment offer new ways of delivering content to listeners, it also offers new methods for obtaining feedback from them. As stressed by all of the participants, the ability to understand the interests of

communities and to provide exclusive, instant, local content are among the radio industry's strong points. In a 2006 Harris/Decima survey, eight out of 10 respondents said they tuned into their local radio station to get community news and information, citing contextual information and human connection as a niche of radio (CAB, 2006 b). According to the CRTC, in 2007, 1,222 radio stations were available to Canadian communities (2008 b). Given the physical presence of radio stations in communities across the country, radio stations are especially well-positioned to monitor and report on local matters that are of importance to the communities they serve.

Building on its strength to provide highly-pertinent local information, emerging technologies allow radio stations to interact with their audience on a new level, further targeting consumers' opinions and thoughts on programming. Undeniably, this added level of interaction acts as a tool for receiving more and faster reaction from listeners. Improved audience interaction provided by mobile technology allows stronger linkages and gives radio a better tool to follow what is happening locally—a second key finding of this thesis. In the following section, we will explore two different technologies that allow radio stations to receive enhanced feedback from its audience. They include: 1) web-based platforms, such as blogs and social networking tools; and, 2) wireless technology, including both voice and data communications.

Based on the idea discussed with the mobility expert interviewed—that radio stations establish a presence on platforms that listeners use to congregate and to share information—web-based platforms like social networking sites, blogs, vlogs and e-zines can also be used to target certain groups of listeners. These interactive tools are excellent means of extending a station's reach and receiving feedback and public opinion on a station's performance. National Public Radio (NPR) unveiled in September 2008 an improved website featuring social networking tools, similar to those found on popular social networking sites like Facebook and Bebo. In addition, the American broadcaster is planning on offering more and more applications that will allow for sharing content and accessing radio streams through mobile phones, with the aim of capturing and retaining audiences. According to Darren Mauro, digital media director at NPR, "Consumers' expectations are changing, and our audience wants more flexibility" (Jesdadun, 2008).

Even the television industry recognizes the potential of social media. US broadcaster CBS announced it would put its network content on several social networking sites, including Facebook, MySpace and iGoogle. Using customized applications, CBS will enable users to watch its TV shows directly from their profile page. An article in the *Silicon Alley Insider* reports, "it's a no-brainer, really: social networkers identify as fans of TV shows, and represent a built-in distribution mechanism and wide audience" (Sridharan, 2008). As *The Globe and Mail* reports, "social networking sites are the hottest attraction on the

Internet, dethroning pornography and highlighting a major change in how people communicate" (Goldsmith, 2008). Indeed, the Canadian radio sector should capitalize on its ability to connect with listeners through the use of Web-based applications, further boosting its online content, its reach and its ability to monitor the likes and dislikes of its audience.

As mentioned on page 56, wireless technology can also be used to interact with audiences. Mobile carriers continue to invest in cutting-edge cellular technology to be able to provide consumers with the latest services and content at the fastest speeds possible. For example, Bell Mobility and Telus Mobility announced in October 2008 that they would both invest in 3G and 4G technologies in order to build a network able to support advanced content delivery and smart phones like the BlackBerry and iPhone. According to Darren Entwistle, President and CEO of Telus, "this initiative will position Telus to actively participate in the future global eco-system and leverage economies of scale, offer timely access to handsets, and enhance global roaming relationships and revenues" (Telus Mobility, 2008). According to a news release issued by Bell Canada, Bell Mobility's parent company, the partnership is expected to become commercially available sometime in early 2010. It is by finding ways to "piggyback" wireless networks and deliver their content via multi-directional cellular technology that radio broadcasters will be able to further connect with its listeners, especially when they are on the move or do not have access to traditional FM devices.

Another way wireless technology can be used to connect with consumers is by making content available to consumers via wireless fidelity (Wi-Fi) networks. Wi-Fi, a commonly used wireless networking protocol, allows enabled devices to connect to a network, such as the Internet, without the use of cables or wires (Wi-Fi Alliance, 2007). Indeed, more and more cell phone makers are integrating Wi-Fi technology into their devices. BlackBerry and Apple are but two examples of corporations now including Wi-Fi technology in a large number of their handsets, including the BlackBerry Storm and the Apple iPhone, both launched in Canada in mid-2008. Wireless fidelity networking technology can be used to link up with a myriad of platforms, allowing users to send and receive both voice and data communications. On page 20, we point to cities and corporations that now offer users access to their Wi-Fi enabled devices for moderate fees and sometimes even for free. This trend toward the intensification of wireless networks, as explored in Chapters 2 and 4, not only allows users to listen to streamed radio stations, wireless technology also allows consumers to instantly connect, interact and share information with radio stations.

Recommendation 2:

Building on the first recommendation, that the Canadian radio industry adopt alternative platforms for *delivering* content to listeners, **it is further recommended that the radio sector use these same alternative platforms, including Web-based platforms and wireless technology, to build its audience and to *receive* highly pertinent feedback from its listeners.**

Not only will increased feedback help the industry further refine its content to the preferences of its audience, it will also help maintain the industry's relevance as radio competes in a new media environment brimming with alternative delivery platforms and new content producers.

5.3. Business realities of mobile content

As explored earlier, more and more mobile devices are being used for multimedia content. Our respondents felt that mobile phones would present opportunities for the radio industry, though the representatives from the radio sector admitted that mobility would also present some challenges. According to the CRTC, in 2008, five operators collected 71 percent of the revenues generated by the English-language radio industry. For the French-language market, over 80 percent of revenues were amassed by three radio operators (CRTC, 2008 b). As indicated by our respondents, radio stations, though increasingly consolidated, are financially sound.

However, as discussed in Chapter 2 and as reported by the OECD (2007), there exists an increasing consumer reliance on mobile platforms, which has resulted in a change in audiences' habits toward using wireless services to access for information and multimedia content. According to a survey conducted by the Consumer Electronics Association in March 2008, "people planning to buy a phone within the next six months had the highest likelihood of subscribing to

non-voice services with the exception of video" (Palenchar, 2008). In addition, data usage in Canada is set to increase about 30 percent to $3 billion by 2010, as forecast in a 2008 report by the Canadian Wireless Telecommunications Association. In a similar manner, a report by BSConseil and commissioned by a French parliamentary committee in 2008, looked at factors such as infrastructure renewal and conversions costs in its study of the future of digital radio. According to the report, "the increasing popularity and the sustained growth of high speed Internet, both on mobile phones and fixed connections, is a threat to the future of digital radio" [translation] (Radio Actu, 2008). Though digital radio will only be ready for broadcast in France at the end of 2009, the report concludes, much like the present thesis, that mobile phones already threaten the future of radio.

For the mobility expert interviewed, data usage can only increase as mobile phone makers, such as Sony Ericsson and Nokia, launch unlimited music download services in certain parts of the world. For its part, Nokia's Comes with Music, which launched in the United Kingdom in October 2008, offers mobile subscribers access to millions of songs from the world's four most important record labels. As for Sony Ericsson's Play Now Plus which is expected to be launched in January 2009, it too is designed to offer a similar service to wireless subscribers. Users of Sony's music store will be able to keep 300 songs at the end of their contract. The difference, however, is that users of Nokia's music service will be able to transfer their songs to their computer for other uses. In addition, once their contract expires, Comes with Music subscribers will be able

to keep all of the songs they downloaded during their subscription to the service (Morrison, 2008). TNS Technology, a British market research firm, predicts emerging unlimited mobile music services, like those listed above, could see 2.1 billion tracks downloaded per year in the United Kingdom alone. TNS states: "the move from individual track purchases to the all-you-can-eat 'celestial jukebox' could shift the market significantly" (Andrews, 2008). In fact, 25 percent of the more than 1,000 people aged 16 to 64 interviewed in the study said they would download 64 tracks a month on average (Wray, 2008). Evidently, as mobile platforms begin to be used as a source of music, the consequences of mobile content on the bottom line of the commercial radio industry become gradually more significant.

On the issue of the future viability of the radio sector, our respondents felt that the industry, though stable now, would need to explore other ways of doing business with advertisers in order to recuperate some of the dollars it is likely to lose to mobile media over the coming years. For the regulatory respondent, radio stations will need to distribute their content on more platforms in order to offer their advertisers the best possible reach. The validity of this position is further illustrated by a Forrester Research report, predicting new media advertising dollars to reach $61 billion by 2012, of which mobile marketing media buys are expected to total $2.5 billion. Compared to 2007 data, this represents a 27 percent annual increase over the next five years. According to the Radio Advertising Bureau (RAB), radio revenue in the United States was down 7

percent on average for the months of September, October and November 2007. Furthermore, RAB estimates the industry will shrink a total of 2.3 percent in 2008, with forecasts for the next five years also in negative territory. Given the recession that has hit the global economy during the fall of 2008, further deterioration is to be expected.

Indeed, it must be noted that wireless growth could be muted by the financial volatility that jolted world economies in late 2008 and is expected to last well through the following calendar year. According to the International Monetary Fund (IMF), "the world economy is entering a major downturn in the face of the most dangerous financial shock in mature financial markets since the 1930s. Global growth is projected to slow substantially in 2008, and a modest recovery would only begin later in 2009" (IMF, 2008). Though the IMF forecasts Canada to be the only G7 country to grow more than 1 percent from the fourth quarter of 2008 to the last quarter of 2009, the economy's performance will continue to be sluggish especially when compared to the high growth rates experienced since 2002. Some industry analysts predict global handset growth to decline by half during the 2008-2009 fiscal year, from 6 percent to just 3 percent (Reuters, 2008). The monthly *Consumer Confidence Index* by TNS Canadian Facts points to a faltering Canadian economy. The overall *Consumer Confidence Index* in October 2008 stands at 88.9, down from 99.6 the month before. "With the global credit crises spreading north, it comes as no surprise that Canadians have now completely abandoned a rosy outlook," said Richard Jenkins, vice-president of

TNS Canadian Facts. What is more, the Buy Index for October 2008, which measures consumers' intent to make major purchases, declined the most, with only 24 percent of Canadians believing that it is a good time to make a major purchase, and 32 percent thinking it is a poor idea to buy right now (TNS Canadian Facts, 2008). Given these extraordinary economic circumstances, it can be said that a sharp decline in world economic growth will affect the rate at which new technologies are adopted and new equipment acquired. With a decrease in consumer spending, it is to be expected that sales of expensive cell phones capable of delivering radio content to listeners, such as Apple's iPhone or Nokia's 5800 Xpress Music handset, will decrease.

Our respondents agreed that a shift in audiences' habits toward unregulated wireless services and mobile content will constitute a significant challenge for the future viability of the commercial radio industry, especially since the radio industry's business model primarily rests upon audience shares to sell lucrative advertising air time. While participants pointed to the current financial health of the Canadian commercial radio industry, most agreed that over the long-term, the industry will face more aggressive competition, notably for advertising dollars. This position is further reinforced by data presented in the 2008 *Communications Monitoring Report*, which shows a 2 percent annual decline in the number of hours Canadians reported listening to radio in an average week, from 19.5 hours per week in 2003 to 18.3 in 2007 (CRTC, 2008 b). As such, our third main research finding is that the radio industry must ensure its long-term viability by

renewing its business model and exploring new revenue sources, especially as advertising slowly loses its dominance as a key revenue driver. There is a need to advertise in different ways, such as: 1) integrating advertising into content; 2) offering mobile advertising options; or 3) cross-promoting products using mobile content.

The first proposed approach, integrated advertising (also known as brand integration), involves weaving advertising directly into the content being presented on air. According to a paper written by the Salter Group in 2004, "advertisers are increasingly regarding content as a platform that can carry brand messages." This approach is in direct contrast to conventional advertising, which involves breaking up content with 15, 30 or 60-second ads. Possible applications of brand integration include product placement or sponsored segments, such as the weather or traffic report (for example, "Today's weather is brought to you by Claritin"). These segments could then be made available for download on radio stations' websites or included in content streamed to mobile phones.

Mobile advertising is when an advertiser uses mobile phones as a tool to reach its audience, often sending them information about their product or enticing potential customers to respond to a call-to-action or to enter a sweepstakes to go see the screening of a new movie. For instance, the promoters of *Eagle Eye*, a film released in the fall of 2008 by Dreamworks and Paramount Pictures, used a combination of text messaging and Web-based content to advertise the

upcoming film on mobile phones. Users were engaged in a game that led to the release of the film a few days later and offered users the chance to win one of several $1,000 gift cards from Circuit City (Ad Age, 2008 a). Finally, cross promotion is a marketing technique using two or more properties to promote each other's content offering in a mutually beneficial arrangement. For the commercial radio industry, this would involve promoting mobile content through traditional live-to-air programming and vice versa, broadening its customer base (More Business, 2007). For instance, at the end of an entertainment segment, the on-air personality would point listeners to a podcast for more information, available for download on the station's website. In return, the podcast would encourage listeners to tune in to the radio station's next entertainment segment on air to participate in a promotion to win a prize. In the same way, YouTube and Discovery Communications announced a partnership to promote Discovery's nine new YouTube channels launched in 2008. As part of the partnership, a number of program marketing initiatives on both the Discovery Channel and YouTube will push users to become viewers of Discovery's online channels (Friedman, 2008). This is a good example of how the radio industry can easily broaden its advertising offerings, by offering advertising via alternative platforms and through its mobile content.

Regardless of the approach adopted, what remains clear is that as on-demand, personalized content infiltrates into the mainstream, the old model of breaking up shows with advertising has become less effective, as some people

simply skip ads altogether using new devices, such as personal video recorders, which allow users to control their own entertainment experience. As advertising represents the majority of radio's revenue, the latter must take action over time in order to maintain its relevance and its viability in the current technological environment.

As suggests an interview participant, history has proven that the consumer is very conservative and often takes more time than expected to adapt to change.

Recommendation 3:

As mobile technologies continue to take away from the radio industry's traditional role as purveyor of music and chip away at its audience share and advertising revenue, **it is recommended that the Canadian commercial radio industry reinvigorate its business model by offering more new services to its advertisers, such as integrated advertising, mobile advertising and cross-promotion.**

5.4. Regulatory considerations

Personal digital audio devices and streaming music services represent the future of music and information delivery. For our interviewees, not only are they platforms for distributing radio content, they can also be utilized to add to the reach of any given radio station. However, the transmission of radio content via

mobile platforms presents another dilemma for Canadian radio broadcasters: compliance with Canadian broadcasting regulations. According to our respondents, it seems much of the problem rests on outdated copyright legislation that no longer responds to the complexities of new media content and platforms, a fourth and final key finding that is explored in detail in the present section.

As examined in Chapter 4, obsolete legislative requirements, as mandated in the *Copyright Act*, have led to a multiplication of tariffs, creating prohibitive reproduction costs preventing the radio industry from adequately responding to the challenges of new distribution technologies. The Canadian Association of Broadcasters (CAB) puts it best in the following entry on its website:

> Broadcasters have requested an amendment to the *Copyright Act* that would provide a meaningful broadcaster exception for technical and incidental copies made within their operations. What does this mean? When stations receive digital music files from music labels, they use digital technology to transfer them into a usable form and store them on their computer servers. Some copyright collectives claim that when stations use technology to make these files broadcast-ready, they are copying the music and thus triggering a payment based on what is known as the reproduction right. Stations are now facing five copyright payments for the same activity—putting music on air (2008).

The same document goes on to detail the burden faced by commercial radio for operating its traditional FM stations. Corroborating what the regulatory expert stated, on top of multiple tariffs paid to make files broadcast-ready, commercial radio stations must also pay an additional three tariffs. Indeed, tariffs paid to SOCAN (for composers, authors and publishers), to the NRCC (for performers and record companies) and to CMRA/SODRAC (a second tariff for composers,

authors and publishers). What is more, the CAB reports that the Audio-Video Licensing Agency (AVLA), a fifth copyright body, has proposed another tariff representing $50 million in industry returns. In fact, over the past decade, copyright payments for commercial radio stations have more than doubled, increasing from $27.9 million in 1997 to $73.9 million in 2006 (CAB, 2008). Canada is not alone in dealing with thorny copyright issues. In October 2008, at the request of the National Music Publishers Association (NMPA), the American Copyright Royalty Board had proposed to increase copyright tariffs from $0.09 to $0.15 for songs purchased online. In response, CEO of Apple Steve Jobs threatened to shut down his company's iTunes store, one of the world's top selling digital music distributors, claiming that he would not run a business that could no longer be profitable. The NMPA's request was subsequently turned down (BBC, 2008). Clearly, the multiplication of tariffs creates an expensive burden for the radio industry, as it requires payment to an endless and duplicative list of rights holders for broadcasting and selling their songs.

It is fair to say that copyright is a complex issue, especially given the challenges faced in the new media environment. Part of the answer lies in updating Canada's *Copyright Act*, which was last modified in 1985 before the arrival of the Internet or mobile phones. The Government of Canada most recently tabled legislation to update the Act in June 2008. However, this point is moot as the proposed amendments died on the Order Paper once the 40th general election was announced the following September. Given the

opportunity to further lobby the Government of Canada before it once again tables its amendments to the *Copyright Act* in 2009, the Canadian radio industry should lobby the federal government for a holistic review of copyright administration in Canada or, more specifically, an overhaul of the way tariffs are collected and distributed to right holders.

Recommendation 4:

As opposed to permitting a number of copyright bodies, much like the example of France discussed on page 62, **it is recommended the Government of Canada combine existing copyright tariffs into one single tariff administered by a neutral body mandated to set, collect and redistribute copyright proceeds in a manner fair to both broadcasters and right holders.**

By streamlining the collection of tariffs and eliminating the duplication of some tariffs, the radio industry will face less prohibitive costs, allowing the industry to more actively explore options for producing mobile content in the new media environment.

Chapter 6: Conclusion

Never could Canadian radio broadcasting pioneer Reginald Fessenden have imagined that his experiment in Washington, D.C. over a century ago would have resulted in the creation of a thriving, global industry. While the basic approach to radio technology has evolved little since 1900, the multidirectional, interactive nature of mobile platforms does pose a real threat to the commercial radio industry.

The original research objectives of this study were: 1) to better understand the increasing role of the mobile industry and of wireless delivery technologies as purveyors of music; 2) to explore their repercussions on the viability of commercial radio; and, 3) to identify their effect on the habits and expectations of radio listeners. The thesis makes four main conclusions, particularly that:

I. it will be important for the radio industry to explore alternative, innovative ways of delivering its content to listeners;
II. the enhanced potential for audience interaction provided by mobile technology allows for stronger linkages and gives radio stations an opportunity to more closely monitor what is happening in the communities they serve;

III. the long-term viability of the Canadian radio industry relies in part on a renewal of its business model, especially as advertising slowly loses its dominance as a key revenue source; and that,

IV. outdated Canadian copyright laws no longer respond to the complexities of new media content and platforms.

We acknowledge the unpredictable and continuously evolving nature of information and communication technologies as well as the effect of ongoing, radical shifts in world financial markets as limitations to the proposed study. It is by exploring the possibility of longitudinal effects of mobile technology on commercial radio that this research benefits the user, and both the radio and mobile industries. By examining the perception of effects on the viability of commercial radio, the industry is better enabled to plan for future core business transactions and allow executives to make enhanced strategic decisions in planning for tomorrow.

To distinguish itself among a sea of emerging digital music providers, the Canadian radio industry must also adopt alternative platforms for delivering content to listeners, such as streaming radio to mobile phones through customized applications, offering downloadable segments or podcasts to listeners, or by partnering with social networking sites, both online and on mobile phones. The Canadian radio industry must also adopt alternative platforms to build its audience and to *receive* highly-pertinent and timely feedback from its

listeners. Indeed, the Canadian commercial radio industry must focus on its niche: making local linkages and providing highly localized community information, as opposed to a standard all-music format. This shift will be largely characterized as a move to more talk, including humour—a practice that sets aside Quebec radio stations apart from the rest of Canada—and less music, circumventing copyright obstacles currently preventing radio stations from shifting their content to other distribution platforms in the new media environment.

As our research findings indicate, a considerable number of radio listeners are gradually migrating to alternative platforms, including portable technologies. As these delivery technologies continue to multiply and as new platforms increasingly compete with traditional delivery technologies, radio broadcasters must continue to look at ways of creating and distributing content, while at the same time retaining their audience share and maintaining relevant business models. Mobile content continues to demonstrate incredible business potential to the eventual detriment of the radio industry. As mobile technologies continue to take away from the radio industry's traditional role as purveyor of music and reduce its audience share and advertising revenue, the Canadian commercial radio industry must reinvigorate its business model by offering more new services to its advertisers, such as integrated advertising, mobile advertising and cross-promotion. In order to address copyright issues, like the multiplication of expensive tariffs, the Government of Canada must work towards streamlining the

process of setting and colleting copyright tariffs. This could be done, as suggested on page 89, through the consolidation of the numerous existing tariffs into one single copyright levy administered by one impartial government body.

What is clear is that the Canadian commercial radio industry is stuck in a war of relevance as it makes its way forward in the new media environment. Listeners are increasingly reverting to "pull" media that allow them to discover and listen to new music at their own pace. Undeniably, this has created a strong desire for personalization of content, a feature FM technology is today unable to provide. Conversely, mobile devices are best equipped to offer complex data services and are well positioned to offer on-demand services to consumers. So much so, the delivery of music via mobile devices could very well become the norm—with subscription fees, unlimited data packages built into monthly air time costs and advertising revenues supporting production and infrastructure costs. For Canada's radio industry, this will likely mean increased competition for listeners, as more Canadians revert to mobile platforms to access, buy and share songs. Indeed, moving forward, it is the consumer who will decide the ultimate fate of both traditional and emerging delivery technologies.

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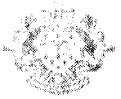
Appendix 1: Certificate of Ethical Clearance



Université d'Ottawa University of Ottawa

Service de la recherche et de la déontologie Research Grants and Ethics Services

SOCIAL SCIENCES AND HUMANITIES RESEARCH ETHICS BOARD

CERTIFICATE OF ETHICAL APPROVAL

This is to certify that the University of Ottawa Social Sciences and Humanities Research Ethics Committee has examined the application for ethical approval of the research project entitled **Mobile Technology and Canadian Commercial Radio: Friends or Foes (File #04-08-31)** submitted by William Shawn Salewski and supervised by Pierre Bélanger from the Department of Communications of the University of Ottawa. The Board found that this research project met appropriate ethical standards as outlined in the Tri-Council Policy Statement and in the Procedures of the University of Ottawa Research Ethics Boards, and accordingly gave it a Category 1a (approval). This certification is valid one year from the date indicated below.

_____

Leslie-Anne Barber
Protocol Officer for Ethics in Research
For Peter Beyer, Chair of the Social
Sciences and Humanities REB

May 27, 2008
Date

Appendix 2: List of In-depth Interview Questions

1. What is your overall impression of the Canadian commercial radio industry?
2. How is the radio industry responding to the emergence of mobile music and alternative delivery platforms?
3. What kind of impact do you think personal audio devices, like the iPhone or Nokia's *Come with Music*, have had on the radio industry?
4. What is your overall impression of the Canadian mobile industry?
5. Do you believe the uptake of mobile technology has had a major impact, a moderate impact or no/little impact on the Canadian radio industry?
6. What role do you think the government should play in regulating how and what you access via new media, such as the Internet or the mobile Web?
7. Should the government establish similar Canadian content laws for new media? What should be done to encourage the development of Canadian content?
8. What impact do you think the CRTC's upcoming consultations on new media, in the spring of 2009, will have on the radio and mobility industries?
9. How do you feel the Government of Canada's recent spectrum auction will affect the business of sharing and helping discover new, emerging music?
10. How does copyright legislation affect radio's ability to tackle the challenges of new media?
11. What do you think the future will hold for the radio and mobile industries in Canada?
12. Do you see a potential for partnerships within the next 5 to 10 years?
13. Who is likely to win the most out of such a partnership?
14. Is the Canadian radio industry adequately positioned to take full advantage of technological developments in the next decade?

Appendix 3: List of Recommendations

1. In order to better compete in the new media environment and to further distinguish itself among a sea of emerging digital music providers, **it is recommended that the Canadian radio industry explore adopting alternative platforms for delivering content to listeners, such as streaming radio to mobile phones through customized applications, offering downloadable segments or podcasts to listeners, or partnering with social networking sites both online and on mobile phones.**

2. Building on the first recommendation, that the Canadian radio industry adopt alternative platforms for *delivering* content to listeners, **it is further recommended that the radio sector use these same alternative platforms, including cellular technology and Web-based platforms, to build its audience and to *receive* highly-pertinent feedback from its listeners.**

3. As mobile technologies continue to take away from the radio industry's traditional role as purveyor of music and chip away at its audience share and advertising revenue, **it is recommended that the Canadian commercial radio industry reinvigorate its business model by offering more new services to its advertisers, such as integrated advertising, mobile advertising and cross-promotion.**

4. As opposed to permitting a number of copyright bodies to charge a myriad of tariffs, **it is recommended the Government of Canada combine existing, redundant copyright tariffs into one single tariff administered by a neutral body mandated to set, collect and redistribute copyright proceeds in a manner fair to both broadcasters and right holders.**