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# Drawing Evolutionary Business Models for the Mobile Music Industry

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**Abstract (structured along the lines of: background, aim, method, results, conclusion – 150 – 200 words):**

The plethora of actors, the complexity of relationships and the variety of information and financial flows affecting the mobile entertainment arena today, have created a series of challenging business opportunities for entrepreneurs and key market players. The evolving and quite promising mobile music market, however, is suffering from the lack of integrated theoretical frameworks critical for the business activity acceleration and for the corresponding mobile music services diffusion. In this paper, we advocate the application of a scenario based business model change methodology for the purpose of transforming the current business models of the traditional and online music industry to a new business model appropriate for the mobile music industry. To do so, we are based on the results of a qualitative research study, which involved in-depth interviews with content providers, mobile operators and music consumers using semi-structured questionnaires. To that end, the present study applies the available business model theoretical insights to the music industry and depicts the current business practice in terms of (i) the employed content delivery channels (i.e. traditional, Internet, mobile), (ii) the participating actors and (iii) the relative flows. Key business modeling issues are discussed and direct managerial implications to potential players are also provided. Finally, straightforward directions for further research are discussed at the end.

## **The Evolving Nature of Mobile Entertainment Business**

Mobile voice services in Europe and Asia are soon reaching saturation, and thus wireless operators are forced to seek for new revenue sources (Durlacher 2001). Keiji Tachikawa, the president and chief executive officer of NTT DoCoMo, Japan's largest mobile operator, declares that: "Unless we are able to cultivate and grow data traffic, we cannot guarantee further growth for the mobile communications industry" (Economist 2003).

In their effort to differentiate their product/service portfolio, diminish their revenue dependence on mobile voice services, and recoup the huge investments made on third generation networks, mobile network operators, try to develop new services and evolve their current business practice. In parallel, traditional music industry value chain is rapidly being re-engineered and many experts in the field support that 'business as usual' in the music industry is over (Meisel and Sullivan 2002). Currently, a wide range of companies including Mobile Network Operators, record labels, computer software and hardware companies as well as dot-coms experiment on finding viable business models for delivering music via electronic channels.

Online music ventures are continuously reshaping their value propositions due to competitive reasons, rights management issues and evolving demands of the online music consumer. While the online music industry is close to a solid business and revenue model configuration, the same is not true for the mobile music industry. The fact is that research (both academic and business) on mobile entertainment in general, and mobile music in more particular, just now starts to emerge (Maciness et al., 2002).

The emerging mobile music market seems to be of great importance for both Mobile Network Operators and music content providers. Mobile Network Operators strive to find new, voice independent, revenue streams, while on the other hand music content providers try to find new ways to distribute their music content securely and at a profit. As soon as a broadband, either mobile (3G) or wireless (WLAN), network infrastructure is established and advanced mobile music devices are delivered, a great set of music subscription services will be provided to the wireless music consumers.

We propose that the scope of the mobile music industry is to market digital music content (music songs, video clips and music related content) over mobile data networks and devices with the objective of offering rich entertainment experiences to consumers anytime and at any place. In a typical mobile business model, we can find a Mobile Network Operator getting music content from a traditional music retailer and music content platform from an application service provider (value inbound flows), and paying commission fees (financial outbound flows) to the content and service providers and the handset manufacturers.

In this paper, we discuss the application of a business model change methodology for the purpose of transforming the current business models of the traditional and online music industry to a new business model appropriate for the mobile music industry. To do so, we have been based on the results of a qualitative research study, which involved in-depth interviews with content providers, mobile operators and music consumers using semi-structured questionnaires. This qualitative research enabled us to better understand the way in which the traditional and the online (fixed internet) music industry business models operate, as well as capture requirements for the emerging mobile music business model.

## **Specifying Evolutionary Modes of Business Models**

Business Model was one of the great buzzwords of the Internet boom. As Joan Magretta (Magretta, 2002) contends: ‘A company didn’t need a strategy or a special competence or even any customers- all it needed was a web-based business model that promised wild profits in some distant, ill- defined future’. After the renowned dot.com crash, it was inevitable for the term “business model” to fall out of fashion. But as Joan Magretta puts it: ‘...the fault lies not with the concept of the business model but with its distortion and misuse. A good business model remains essential to every successful organization’.

In order to describe and analyze a business model, several conceptual models and ontological frameworks have been provided in the literature (Weil and Vitale, 2001; Osterwalder and Pigneur, 2002). Some of them emphasize the revenue model followed and the value raised for the customer

(e.g. Afuah and Tucci, 2000; Chesbrough and Rosenbloom, 2000), while some others focus on analyzing the actors that participate in the model and their exchange flows (e.g. Gordijn and Akkermans, 2001; Papakyriakopoulos et al., 2001). In this research, we adopt the view that a business model is a 'collection of a series of bilateral relationships between players of the same or different industries, all participating in the creation of value' (Rayport and Sviokla, 1995). The term 'value' includes the service flow and the communication flow (Barnes 2001). Thus, the main components discussed in the business model analysis of the emerging mobile music industry include actors and value (service, communication, revenue) flows.

Under the influence of technology trends, most importantly information and communication technologies (ICT), many current organizational business models are being questioned, and companies are faced with the challenge of business model change. However, creating a radically new business model is a high-risk strategy, as the probability of getting it right is acknowledged to be low (Kalakota & Robinson, 2001). Companies typically choose to focus on an improvement strategy that is less risky and extends or renews their existing strategy and business model. The issue of business models change is an emerging domain of research on business models (Pateli & Giaglis, 2004) with intense interest for further investigation but only a few studies currently addressing it.

Amongst the few authors researching the area, Tapscott et al. (2000) have identified six steps for changing a current business model to a b-web model. Naturally, the method proposed is customized to the b-web concept and thus can hardly be thought of as a generally applicable change methodology.

Following a different approach, Linder and Cantrell (2000) provide a general framework that defines a set of change models, classified based on the level of change introduced by the new business model: realization, renewal, extension, and journey models. The identification of four types of change models serves the organizations' need for first identifying the level of change, and thus the change model, they want to introduce, and then building the organizational machinery required for executing their change model.

Petrovic et al. (2001) have made an attempt to introduce a generic business model change methodology grounded on a well-established theoretical framework. However, the steps of their

methodology are described in quite general terms, and no guidelines or advice is provided for the core part of the methodology, which is the actual implementation of change.

Finally, Papakiriakopoulos et al. (2001) propose a step-by-step methodology for transforming a business model, responding to the need for changing the firm's technology infrastructure. Again, the utility is restricted in the sense that it applies only to technology-driven business model change, as opposed to change driven by a new market or business opportunity. The analysis is also focused on industry level (as opposed to firm level) change.

Although all these methodologies provide valid starting points for addressing business model change, they all share a common drawback: they are quite monolithic, in the sense that they provide a strict linear sequence of steps that an organization should follow when approaching business model change as a result of a technology innovation. As such, these methods might be more appropriate in relatively stable industry settings where a lower level of risk might be associated with business model change. However, when considering more turbulent and complex contexts, such as the emerging market of mobile and wireless communications that is dealt with in the case study discussed later in this paper, such methods might not yield satisfactory results. In this paper, we advocate the use of a scenario-based methodology for approaching business model change. Using scenarios has been acknowledged as standard management practice to support more flexible decision-making and less risky strategic positioning against alternative 'futures' (Godet, 2001).

In the following section, we discuss the application of these methodology for drawing scenarios or alternative business models for the commercialization of mobile music services.

## **Scenarios for Alternative Mobile Music Business Models**

The methodology consists of three phases, which are further decomposed into six steps. In what follows, we briefly discuss the primary mission and anticipated result of each phase and describe the steps included in it.

### **Phase I: Business Model**

The purpose of this study is to map a set of emerging mobile music business models. To do so, one should first map and understand the predecessors of the mobile music business model, namely the business models of the traditional and the online music industries.

#### *Step I: Document the Current Business Model*

For developing the business models of the traditional and online music industries, we employed a qualitative research design along with an extensive literature review. In addition, we thoroughly examined a set of available current business practices (case studies). More specifically, in-depth semi-structured interviews with three key players of the music industry were conducted. Next, nineteen interviews with executives from music content providers in Greece and UK were conducted. Music content providers interviewed were major labels affiliates and local independent music labels. Finally, twenty-five consumers in Greece and UK were interviewed. Potential mobile music consumers were selected using a convenience sampling methodology, which is considered to be appropriate in exploratory research settings as the present one. *Figure 1* provides a graphical illustration of the methodology employed for capturing information on the reference business models of the traditional and the online music industries.

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Insert Figure 1

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The first step was to document the current business situation in order to define realistic business requirements for the design of the mobile application and to outline the business environment in which it will be introduced. This analysis included a detailed description of industry norms, types of stakeholders involved, partnerships, revenue-sharing agreements, and so on. Due to space limitations, only the analysis of roles is presented in *Table 1*.

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Insert Table 1

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According to *Table 1*, the key players in the traditional music industry are ten, while the Internet music industry involves nine actors. The information and revenue flows between these actors in each business model are illustrated in *Figures 2, 3*.

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Insert Figure 2

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Insert Figure 3

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## **Phase II: Identify Technology's Influence**

### *Step 2: Asses the Influence of Technology Innovation*

Following the specification of the two currently adopted business models for the delivery of music content, this step aimed to identify those business model elements that are most liable to change due to the introduction of the mobile network as alternative or advanced music delivery channel. Based on theoretical investigations in the area of technology innovation but also a series of discussions with the above presented music stakeholders, several effects of the mobile technology on the current way of providing music services have been spotted and are briefly described in *Table 2*.

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Insert Table 2

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### *Step 3: Identify Missing Roles*

The roles identified in step 1 have been found inadequate to supply the competencies required for the delivery of music via a mobile channel. More specifically, the need for one or more new player(s) accomplishing the following groups of activities has been identified:



- a) *Development and maintenance of the content storage and delivery platform.* This activity includes the tasks of development, implementation, configuration, and administration of the mobile music platform, which is used to organise, store and manage music files.
- b) *Music content provision and syndication, management and delivery.* Syndication refers to “selling the *same* information to many *different* customers, packaging it with other offerings in uniquely valuable ways, and then redistributing it” (Werbach, 2000). In this case, syndication concerns creating personalised “music albums”, including audio and video clips that the music consumer has downloaded to its handheld device, or dynamically personalising the music distributed to each mobile user, giving the sense of providing a personalised “mobile radio program”.
- c) *Handset manufacturing and customization,* including tasks for collecting requirements for evolving the current mobile phones or the emerging smart phones, as well as designing new type of handheld devices, that could be used as mobile music players of high quality.
- d) *Mobile network operation and maintenance for music delivery,* including tasks for evolving the current network installation with 3G features, so that the delivery of music content (audio, video, and news) and services of high quality is assured.

### **Phase III: Change**

#### *Step 4: Define scenarios for alternative business model configurations*

Some of the above responsibilities can be allocated between two or more actors of the traditional and online music industries. For instance, the role of mobile platform development and maintenance can be played by either an application provider of the online music industry or, less possibly, by a media company, currently belonging to the traditional and online music industries. However, some responsibilities demand for new players acquiring resources and skills that none of the current music stakeholders possess. *Table 3* lists the set of key roles in the mobile music industry.

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Insert Table 3

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The scenarios described hereinafter concern alternative allocation of the above responsibilities between the actors of the traditional and online music industries as well as newly introduced players belonging to the mobile industry. These scenarios have been defined and discussed through the qualitative study, which was described in step 1. Analysis of the results indicated three possible scenarios for further consideration.

- a) The *Direct Sell* scenario. This scenario concerns the provision of a direct channel for delivery of music from the branded music retailer to the mobile consumer (e.g. i-mode site). It involves a loose 'content – operator partnership agreement' for the access to the music library of the branded music retailer by the subscribers of the mobile network.
- b) The *Aggregator* scenario. According to this scenario, the overall responsibility for both technology infrastructure support and service provision and management belongs to the mobile network operator, who usually acts as a portal aggregating a set of mobile entertainment services (e.g. music, news, astrology, games, etc.). In this scenario, the agreement between the branded music retailer and the mobile network operator requires higher commitment from the part of mobile music retailer, since the brand name of the operator is under greater risk.
- c) The *Hybrid* scenario. As it is inferred by its name, this scenario includes delivery of music content and services through a dual channel; the MNO's portal and the site developed by the branded music retailer, wholesaler, record label or even the traditional media.

*Step 5: Analyze the key elements of alternative business models*

Each of the above scenarios can lead to the development of one or more alternative business models by assigning real-world players to the scenario's roles and discussing in detail issues regarding the value proposition of each actor, the partnerships developed between them, the key resources contributed by each and their revenue-sharing agreement. Hereinafter, due to space limitations for analyzing a set of alternative business models implementing each scenario, the paper has focused on

formulating three general but representative business models, naming each one based on the scenario that it implements.

*The “Traditional Retailer” Mobile Music Business Model*

In this case, the MNO (Mobile Network Operator) takes a less active role in handling mobile music content. This means that the mobile music service offered by branded content retailers (e.g. a CD retailer, a music channel) will be the one with which the music customer will interact. Obviously, there can be many mobile music retailers’ sites in the mobile portal of the MNO, who will compete for gaining mobile customers’ preference. These “retailers” will be responsible for crafting the marketing mix of the music service offered to music customers, so as to be appealing to their predefined music customer target group. Music customers will select their mobile music retailer based on the offered marketing mix and most importantly based on perceived mobile music service quality (Vlachos et al. 2003). These mobile music retailers will exploit the music content and the mobile music platform offered from a service provider who will probably act as a content aggregator having deals with several. Figure 4 maps an instance of the “Traditional Retailer” mobile music business model.

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Insert Figure 4

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While the value flow diagram, depicted in Figure 4, is somewhat simple, that is not true for the revenue flow diagram. We have hypothesized that consumers pay branded music retailers for the music content they buy (through their monthly phone bill or in a ‘pay as you go’ way - i.e. the reduction in the value of the prepaid mobile phone card). The fees of the MNO will probably stem from: (a) the charges for the consumers’ usage of the mobile data network, and (b) a commission based fee from the branded music retailer (Ratliff 2002). The fees for the music retailer come from charges on the music services (subscription-based) as well as charges on the music items sold (item or volume-based).

This specific business model includes also the case where records labels market their content directly to music customers (i.e. “disintermediation” effect in e-commerce) (Turban and King 2002). This

strategic decision will be based upon two major factors: (a) the emerging channel conflict between the record labels and traditional retailers, and (b) the mobile users' requirements; whether they prefer the one-stop-shop solution (provided by the MNO's portal) or opt for buying their preferred music content directly from their producers or retailers.

#### *The "Mobile Network Operator Dominated" Mobile Music Business Model*

In this case, mobile music services are solely offered by Mobile Network Operators (MNO). In other words the MNO takes the role of the mobile music retailer – i.e. the brand. The MNO gets the music content from a music content aggregator and offers it to its customers through an "own branded" mobile music service. It is obvious that in this specific business model, the MNO takes a more active role in handling the mobile music service. Therefore, the MNO will be responsible for crafting the marketing strategy and the marketing mix of the offered mobile music service. Regarding the elements of the marketing mix, this business model assumes that the MNO will have to define them. For example, with regards to the product element of the mobile music service marketing mix, the MNO will be the one that should decide on the brand name and logo of the mobile music service, the music content depth and width, the user interface, e.t.c.

A strategic issue related to this model is whether the MNO will allow other branded mobile music services to be offered through its mobile music portal (see the *traditional* retailer mobile music business model). For drawing the business model instance, in *Figure 5*, it is assumed that the MNO will not allow other branded mobile music services to be offered to its customer base.

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Insert Figure 5

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With regards to the revenue flow model, the service provider pays a fee to the content providers for music content licenses, and the MNO pays fees to mobile music service provider for music content aggregation services and for the mobile music platform. From the demand-side perspective, consumers pay fees to the MNO for accessing the mobile music service and for using the mobile data network.

### *The “Hybrid” Mobile Music Business Model*

In this mobile music business model, the service provider offers its platform and content both to the “branded music retailer” and to the MNO. In this business model scenario, the end-user can subscribe (or choose the pay *as you go* payment scheme, if it is offered) both to the mobile music service offered by the “traditional music retailer” and to the mobile music service marketed by the MNO. Simply, in this scenario, the MNO decides to offer through his mobile portal also his own branded mobile music shop (as is the case of ‘own label’ products in grocery retailing).

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Insert Figure 6

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*Figure 6* depicts the case where consumer C1 has preferred to get his/her pure mobile music directly from the Branded Music Retailers, while consumer Cn has chosen the mobile music service offered from the MNO.

### *Step 6: Estimate the impact of technology innovation on the external environment*

The impact of the proposed business models for the commercialization of the mobile exhibition application was specified in terms of a number of direct or indirect effects brought to bear on the emerging mobile music market based on Porter’s five forces model (Porter, 1985). Thus, the implementation of a mobile music business model is expected to have the following impact on the music industry:

- introduction of mobile operators in the role of music media channels or music content provider/aggregators,
- further risk for infringement of music copyrights,
- rising interest by players in the horizontal music value chain (complementors or competitors) in offering complementary services (e.g. music collections, music portfolios with news, photos, and music from a specific singer, etc.), and thus fostering partnerships towards horizontal integration.

The commercialization and adoption of mobile music services is also expected to contribute to the growth of the mobile market by enhancing the public's familiarization with wireless and mobile technologies and applications, encouraging development of more advanced mobile applications targeted to the public, and enforcing the role of value-added content providers over the dominant mobile network operators.

### **The Choice of Appropriate Mobile Music Business Model**

The elaboration of viable mobile music business models has suggested the establishment of a new actor, called as *mobile music service provider*. This actor will undertake two major functions; (a) obtaining licenses for distributing music content and (b) creating, delivering and maintaining the mobile music platform that will support the downloading and/or streaming of music content (audio, video clips, news). In other words, this actor will assume an intermediate role between the content owners/ providers and the mobile music retailer, either being a "traditional music retailer" or the Mobile Network Operator.

A major issue to discuss is which one of the previously deployed business models will prevail in the emerging mobile music industry. Predicting the future structure of an industry consisting of a variety of actors and roles is undoubtedly a very difficult task as it is dependent on many different factors. However, it is for sure that the shape of the pure mobile music industry will be dependent upon the mobile music market dynamics. More specifically, our research findings indicate that a specific set of factors will determine which business model will be introduced in the emerging mobile music market. Table 4 summarizes these factors.

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Insert Table 4

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Based on these factors, one can say that, in general, the strategic objectives of the relevant actors, their business philosophy, the market power that each holds, and basically the consumer acceptance of the marketing mix (product/service, price/revenue model, promotion, place/ mobile device) that will be derived from a specific business model, will finally determine and affect the prevalent mobile music business model.

At this point, it is worthwhile noting that the three mobile music business models provided through the present study are not mutually exclusive, meaning that they can coexist. It is apparent, however, that an MNO may follow its own business model for offering pure mobile music service to end-users.

To conclude with and in order to provide a classification scheme of the three previously deployed mobile music business models, we use two variables that essentially differentiate them, namely (a) the number of branded mobile music retailers, and (b) the total quantity of transactions being held in each business model. The reason for selecting these two dimensions so as to classify the proposed mobile business models is two-fold: Firstly, because these variables correlate strongly with the two basic components that characterize every schematic representation of a business model, that is the “*Actors*” and “*Relationships*” components. Secondly, if one carefully studies the three alternative mobile business models will notice that the basic differences between them lie in these two metrics. In *Figure 7*, one can see that the *hybrid mobile music business model* is situated in the upper right corner of the figure, denoting that this specific business model entails a great quantity of overall transactions between all actors and numerous branded mobile music retailers, including the Mobile Network Operators’ mobile music offerings. Based on this classification the “Mobile Network Operator” dominated business model is the leanest of all, since it entails the smallest number of total transactions between the actors and the smallest number of branded mobile music retailers. The “branded retailer” business model is between the other two mobile music business models, since it entails a medium to high quantity of transactions and medium to high number of branded mobile music retailers.

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Insert Figure 7

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The three previously discussed mobile business models try to predict the logic that will underlie the mobile music industry actors in their effort to generate revenue. Consumers’ needs and corresponding actors’ strategy will finally determine which will prevail.

## **Further Research**

This research has tried to identify business models for the emerging mobile music industry. Using the method of in-depth interviews with major players in the music value chain as well as with several MNOs, and the method of secondary data (case studies) research, we documented the traditional and the online music industry business models, which act as the reference business models for the forthcoming mobile music industry. With the aid of a theoretically identified methodology for changing business models (Pateli and Giaglis, 2005), we have drawn three (3) scenarios for business model evolution.

The current work has opened up several opportunities for assessing and comparing the three business models for the mobile music industry through several real world case studies. A current research stream includes collection and examination of a number of case studies concerning provision of mobile music worldwide. As soon as a considerable number of case studies that match the scenarios identified above have been spotted, a qualitative research, primarily using the method of in-depth interviews, will be initiated. The investigation will include assessment of each mobile business model under a multi-dimensional evaluation framework, including criteria for all the primary stakeholders; music content providers (record labels, music retailers, media), application providers, mobile network operators, and music consumers. Key evaluation parameters on which such a research could focus include: a) adoption from music consumers, b) increase of revenue per mobile subscriber for mobile network operators, c) gross profit from mobile services (news, audio files, streaming service), d) commission rates for content and application providers.

The above, or a similar, assessment framework could constitute the basis not only for assessing each instance of business model, but mainly for comparing the business models that they implement through the method of inference. Towards this direction, that is the comparison of the three theoretically developed business models, one should examine other environment and firm factors that can possibly differentiate the evaluation outcomes of each business model instance. Such factors relate to the environment conditions (e.g. regulation, technology maturity), the industrial setting (e.g. number of music content providers, structure of the music value chain), the market requirements (e.g.



technology profile of the market, penetration of mobile technologies) as well as the strategic orientation of the mobile operators in the investigated context.

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**Table 1:** Roles and Responsibilities in the Traditional and Online Music Industries

<b>KEY PLAYER/ACTOR</b>	<b>OBJECTIVE</b>
<b><i>Traditional Music Industry Value Chain</i></b>	
<i>Composer</i>	Compose songs that people would like to listen
<i>Performer</i>	Perform songs that people would like to listen
<i>Publishing Company</i>	Protect music intellectual property rights and collect royalties
<i>Record Label</i>	Sell specific recorded music content to music consumers at a profit
<i>Music Collection Society</i>	Protect music intellectual property rights and collect royalties
<i>Live Music Events Organizer</i>	Organize and promote live music events
<i>Media</i>	Broadcast "mixed for you" music content that will attract many viewers and listeners
<i>Music Wholesaler</i>	Sell recorded music to small music retailers at a profit
<i>Music Retailer</i>	Sell recorded music to music consumer at a profit
<i>End-User</i>	Experience music entertainment
<b><i>Fixed Internet Music Industry Value Chain</i></b>	
<i>Content Providers</i>	Sell music content to Service providers at a profit
<i>Music Creators</i>	Compose songs that people would like to listen
<i>Application Providers</i>	Market applications required for delivering fixed internet music services (e.g. media players, digital rights management systems).
<i>Service Providers</i>	Aggregate and market online music content to end users and business customers. Create and deliver the online platform for delivering music to end customers.
<i>Service Affiliates</i>	Offer their visitors music services
<i>Credit Card Authorization Providers</i>	Facilitate distance shopping at a profit
<i>Internet Service Providers</i>	Offer World Wide Web access to end users, hosting services and music services.
<i>Music Collection Societies</i>	Protect music intellectual property rights and collect royalties
<i>End -User</i>	Experience music entertainment online

**Table 2: Major Benefits for Stakeholders in the Mobile Music Industry**

STAKEHOLDERS	BENEFITS
<i>Record Labels</i>	<ul style="list-style-type: none"> <li>• New distribution channel (another way to get to the consumer)</li> <li>• New revenue source</li> <li>• Gains in production, marketing and distribution expenses</li> <li>• New channel for promotions and offer making</li> <li>• Due to the inherent security characteristics of wireless networks-compared to fixed networks, protection of copyrights is better off</li> </ul>
<i>Technology Providers</i>	<ul style="list-style-type: none"> <li>• Extra revenues from the licensing of the platform and services.</li> <li>• Differentiation from the market</li> <li>• Develop new value added services</li> <li>• Expand existed product portfolio</li> </ul>
<i>Network Operator &amp; Service Provider</i>	<ul style="list-style-type: none"> <li>• New value services offered through the existing network</li> <li>• New revenue source</li> <li>• New channel for promotions and offer making</li> <li>• Potential for “services bundling” (e.g. bundle short message services with music content)</li> <li>• Offer real time video/audio/text (news), music related content to its customers</li> <li>• Extend market position</li> </ul>
<i>User</i>	<ul style="list-style-type: none"> <li>• Easy access to music and music related content (anytime-anywhere)</li> <li>• Personalized and contextual aware music content and information</li> </ul>

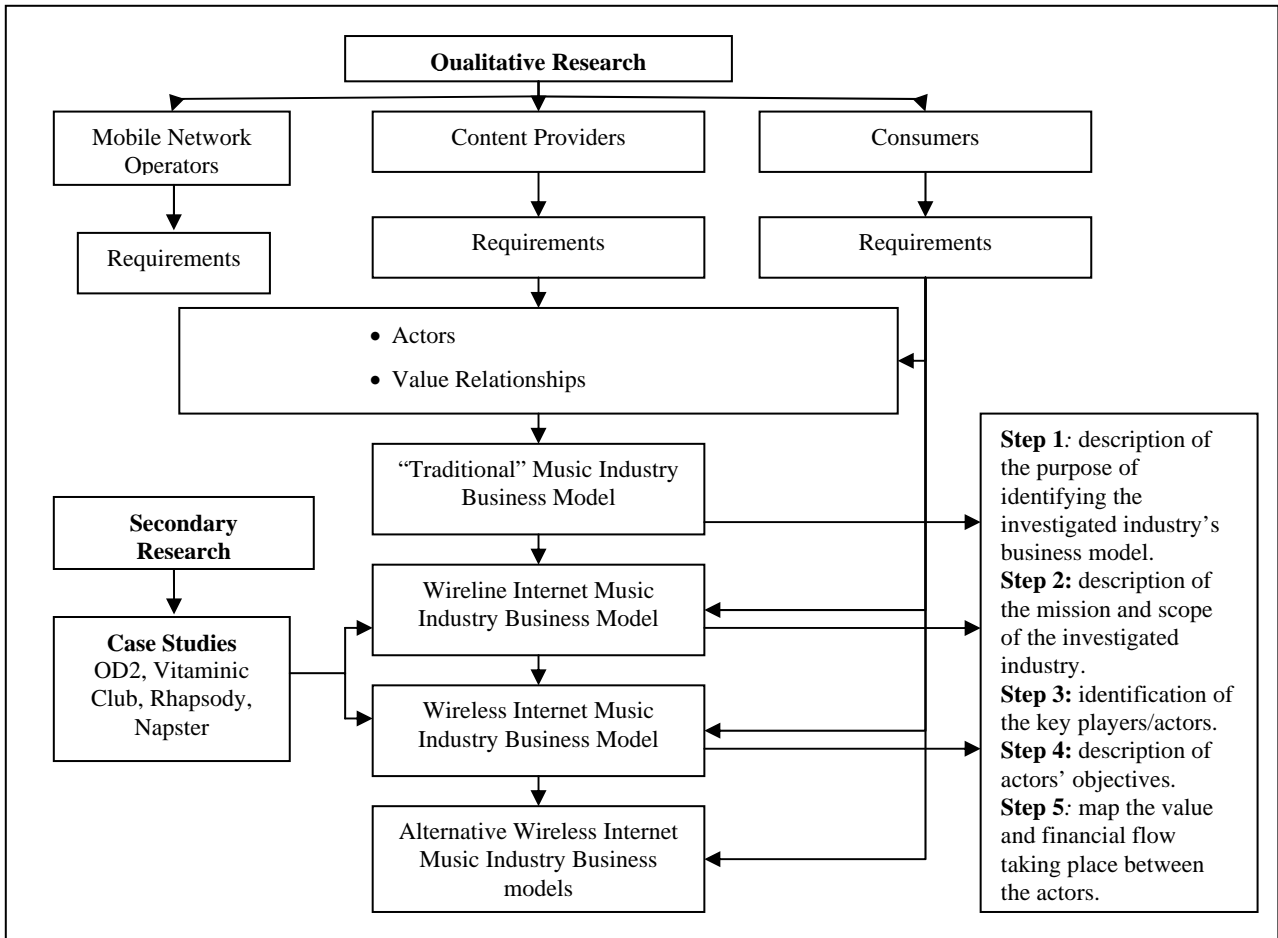
**Table 3:** Roles and Responsibilities in the Mobile Music Industry

<b>KEY PLAYER/ACTOR</b>	<b>OBJECTIVE</b>
<i>The "Pure" Mobile Music Industry</i>	
<i>Content Providers</i>	Sell music content to Service providers at a profit
<i>Application Providers</i>	Market to device manufactures and wireless network providers applications required for delivering mobile music services
<i>Handset Manufacturers</i>	Market mobile devices that will enhance the user entertainment experience.
<i>Service Providers</i>	Aggregate music content and offer the platform upon which music content will be delivered
<i>Mobile Network Operators</i>	Offer their subscribers mobile music services
<i>Music Collection Societies</i>	Protect music intellectual property rights and collect royalties
<i>End –User</i>	Experience music entertainment anywhere and anytime.

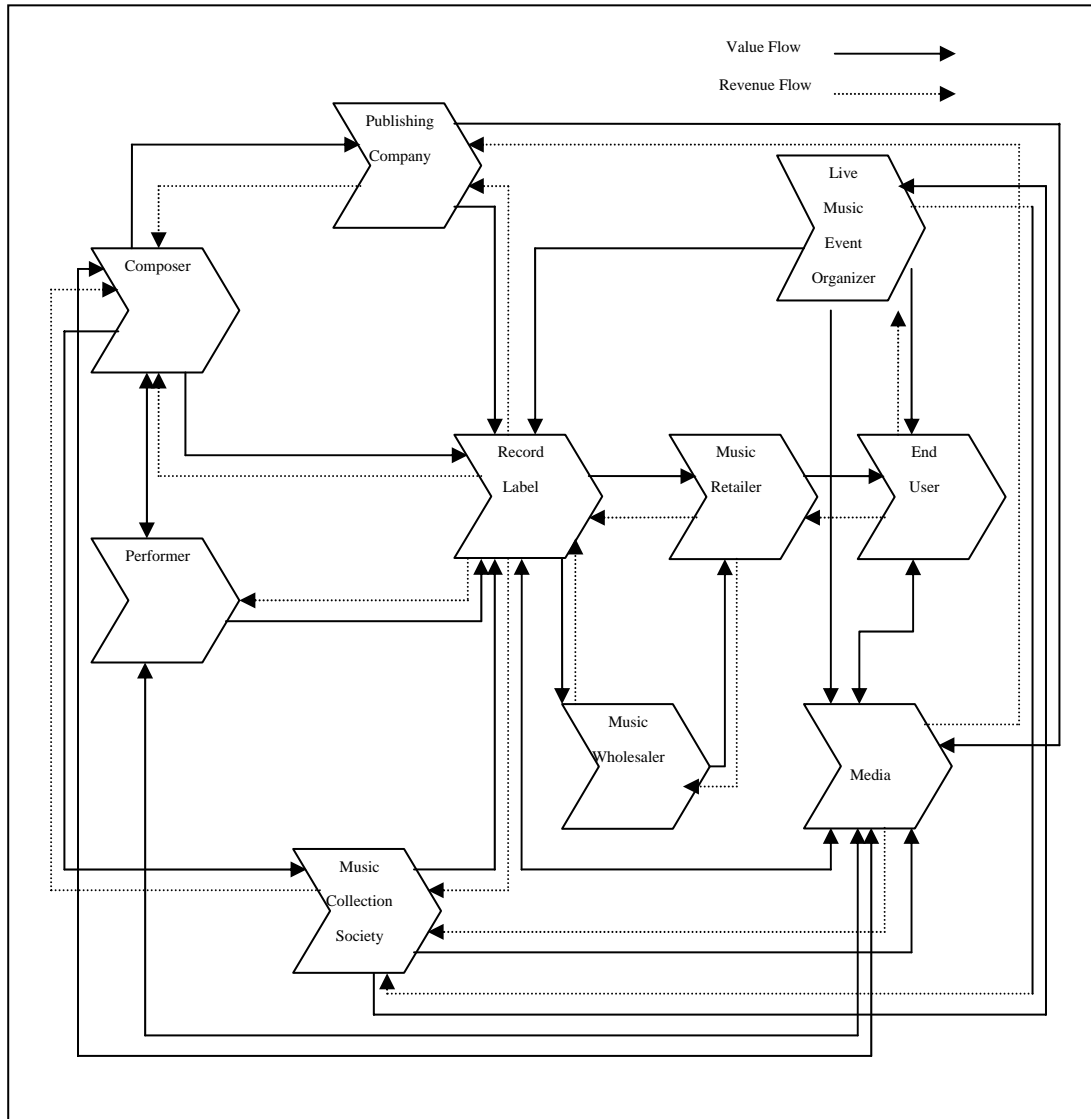
**Table 4:** Factors affecting Mobile Music Business Model selection

<b>Factor</b>	<b>Description</b>
<i>MNO strategy</i>	Will the MNO go for an “open” and quite competitive mobile music market or will consider its customer base as a property that only he can capitalize on?
<i>MNO assets &amp; capabilities</i>	Does the MNO perceives its assets (technological, human and marketing assets) as sufficient enough for offering an own branded mobile music service?
<i>MNOs’ perceptions regarding consumers’ requirements</i>	What are the perceptions of MNO’s management with regard to the consumers’ requirements for a mobile music service? Do consumers want many mobile music service retailers while accessing mobile music? Is it important who is going to offer a mobile music service (e.g. they better prefer a familiar music retailer brand over a mobile operator to offer mobile music services or they do not care?)
<i>Music Retailers’ strategy</i>	Will traditional and pure play fixed internet music providers go for delivering their offerings to the mobile medium too? Will they be willing to interact with the end users or they would rather act content wholesalers for the MNOs.
<i>Competition</i>	What will be the mobile music strategy of other Mobile Network Operators and other brick and mortar and pure play music retailers? Can the employed business model lock out competitors?

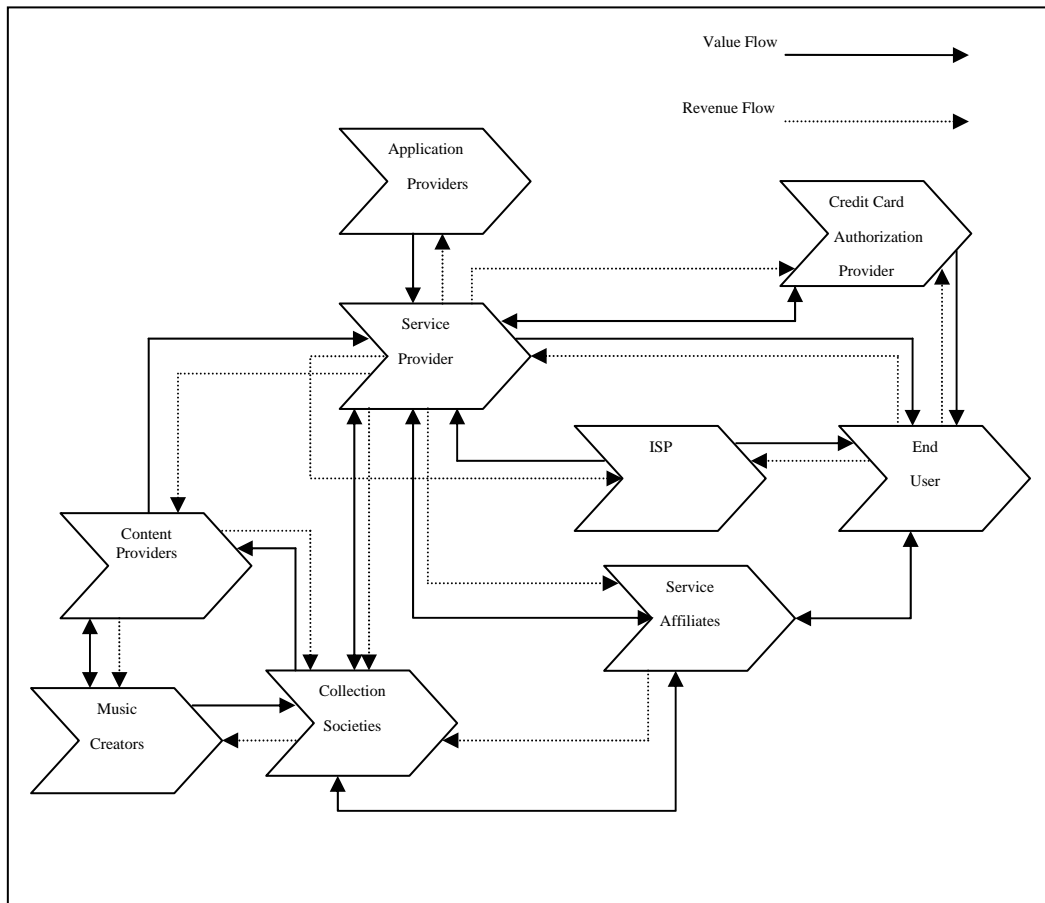




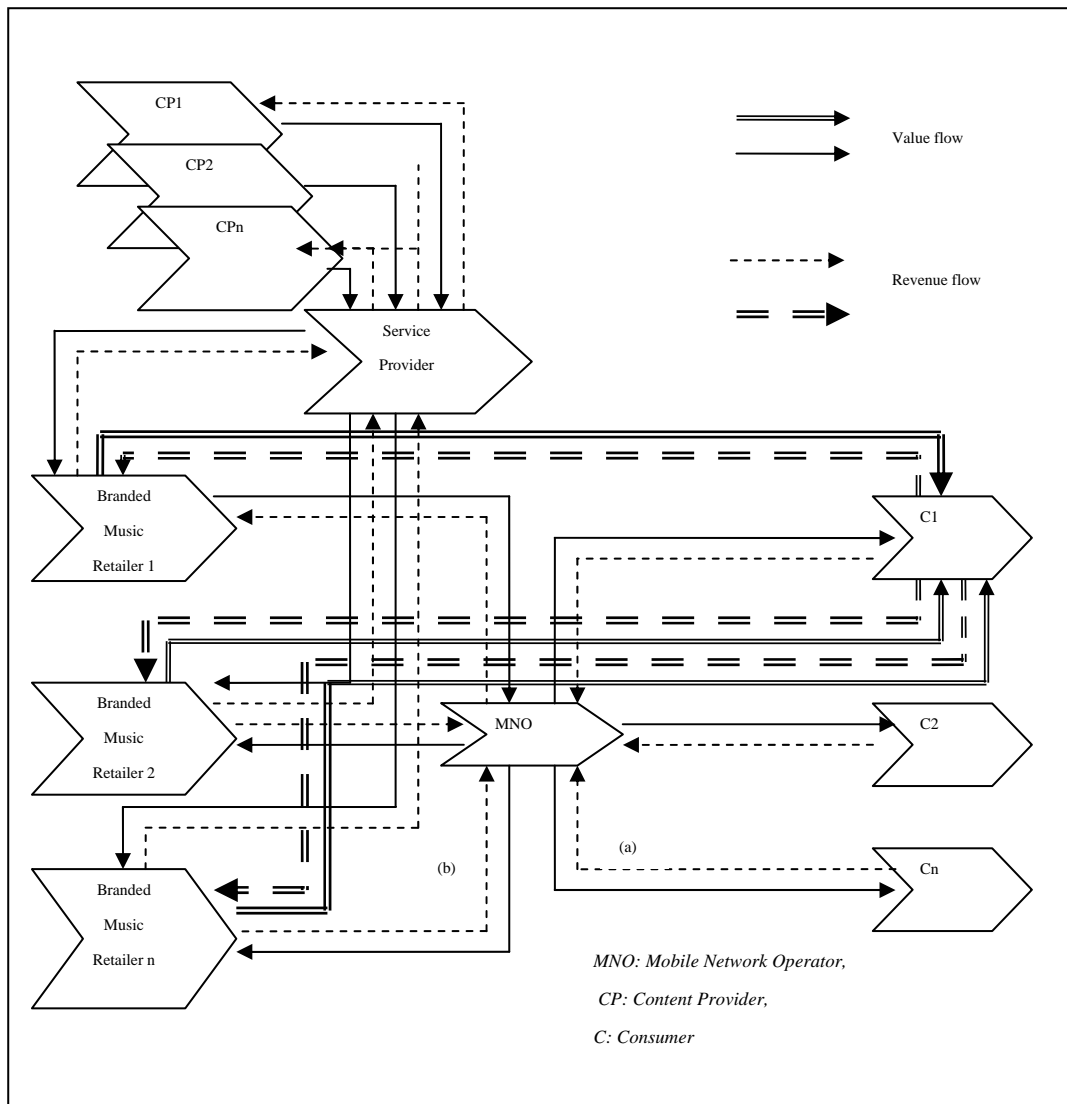
**Figure 1: Qualitative Research Methodology**



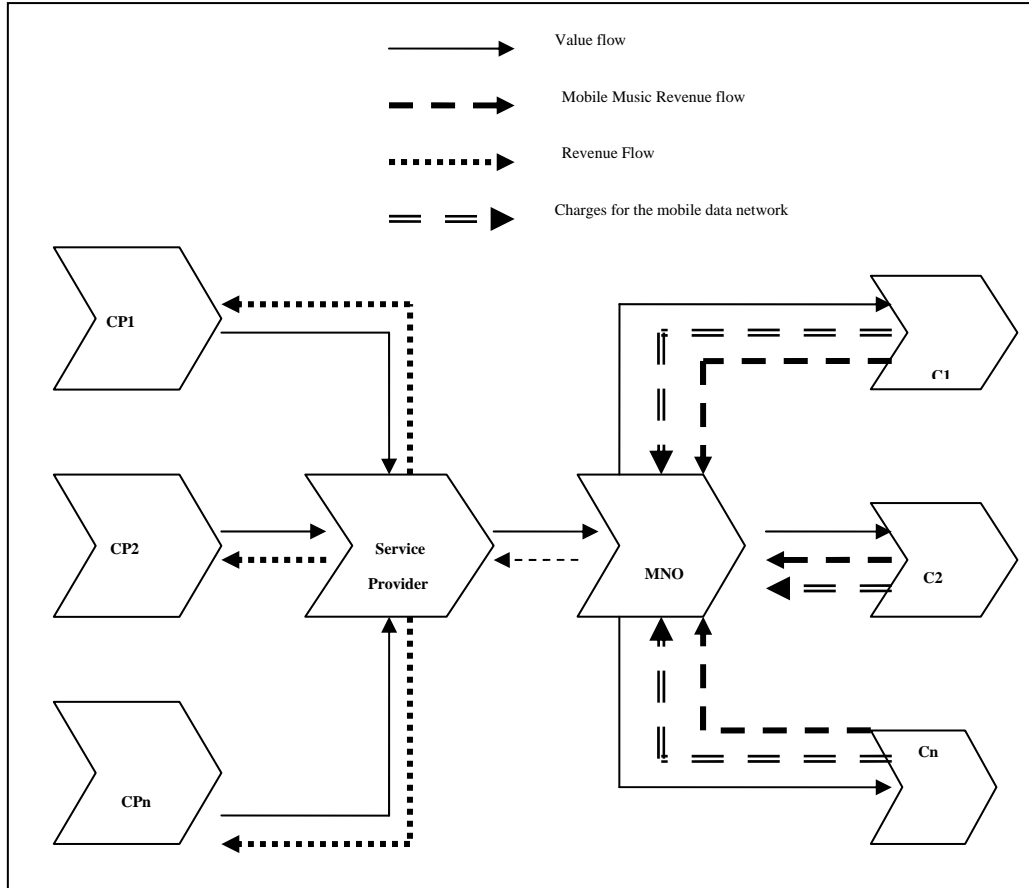
**Figure 2:** Music Industry Current Business Model



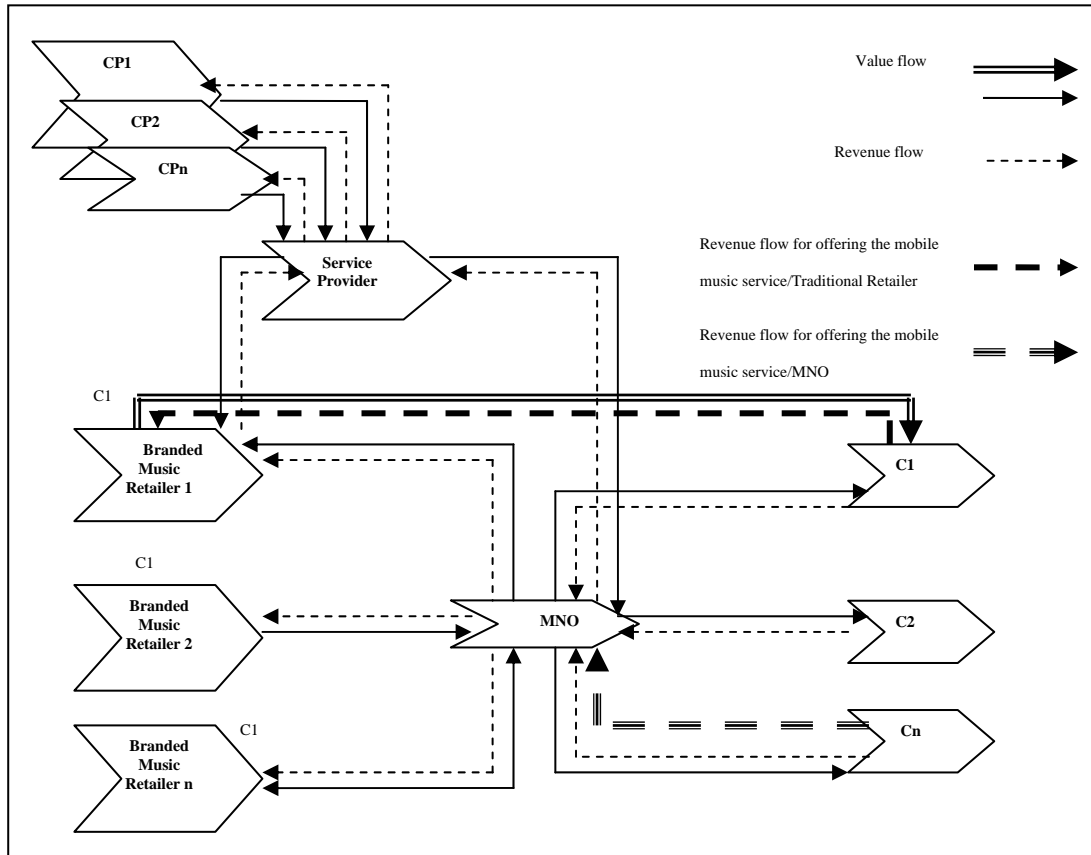
**Figure 3: Fixed Internet Music Industry Business Model**



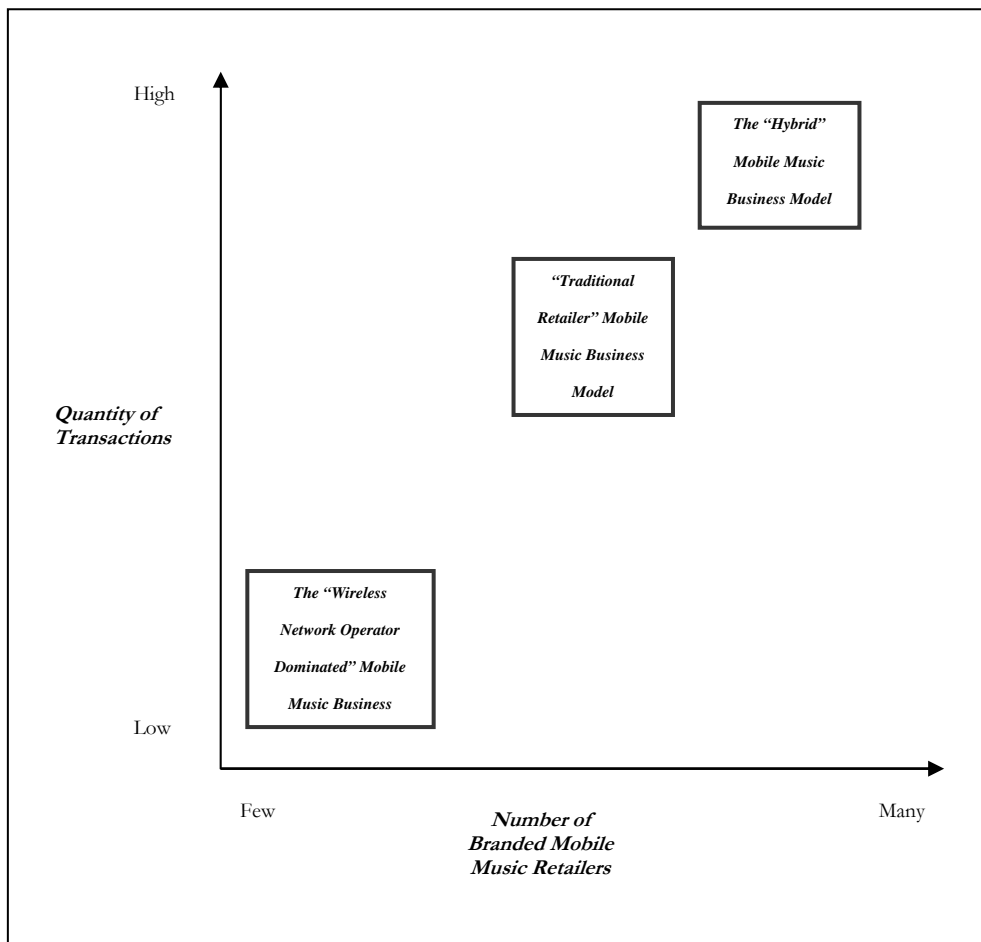
**Figure 4:** "Traditional Retailer" Mobile Music Business Model



**Figure 5:** The “Mobile Network Operator Dominated” Mobile Music Business Model



**Figure 6:** The "Hybrid" Mobile Music Business Model



**Figure 7:** Categorization of the alternative mobile music business models